



## Middle School Curriculum Grades 7 and 8

### **Humanities**

Middle School Humanities classes are part of a three-year journey through regions of the world, continuously making parallels between the past and today's world. A conglomerate of literary studies, vocabulary, writing, and social studies. Humanities uses a variety of texts and approaches to the topics that are student-centered and allow the individual to thrive.

Regular, critical reading is practiced in Humanities classes. Poetry, articles, essays, short stories, and novels of various genres are frequently incorporated into classes. Both individual and group reading occur as well as discussions about texts. Students learn how to annotate in their sixth year, and they will use annotations to drive class discussion with inquiry, insight, and analysis.

Fluent, multi-paragraph writing is practiced with the students throughout their Middle School years using the Columbia Teachers College rubric as a guide. Essays, poetry, narratives, and research are all part of the writing program. Students are taught to be writers and editors and practice the writing process independently and together.

Presentations are a regular part of Humanities classes with collaborative projects related to units of study and bimonthly current events days. Current events are an important component of Humanities as they allow students to become experts in a present, global or national news item. Students write a paper that incorporates research about the issue, summarizes the event, discusses the greater impact on the world, and gives compelling reasons why it matters. They must also lead a discussion with the class using prepared questions to further the conversation and allow others to voice their opinions.

All students in Middle School use the *Word Wisdom* vocabulary program. The units center around root words and prefixes and teach students to find meaning not by memorizing definitions, but by making parallels between words. Synonyms, analogies, reading in-context, and writing for meaning with new words help students master them.

### **Science**

The Fraser Woods Middle School Science Program is an inquiry-based program that draws from a diverse set of curricular resources. Inquiry-based science offers students the opportunity to learn in a setting in which they feel safe to question and explore. By investigating science phenomena through active discovery, they develop deep knowledge, overcome incorrect preconceptions, and build a foundation for future learning. All 6th and 7th Year students take part in an annual Science Fair, conducting and presenting an experiment of their own design. Eighth Year students conduct a long-term in-depth research project which is presented at an Expert Symposium in the spring.

The main objectives of the science program are to help students develop skills in the following key areas while acquiring content knowledge: laboratory procedures and safety, measurement, information processing and management, scientific investigation, critical thinking and data organizing. Middle School students learn these skills through active, inquiry-based lesson plans and cross-curriculum studies and projects that interact with the Art, Humanities and Mathematics Programs. In addition to regular classroom activities, students conduct laboratory investigations and research projects individually and in teams, presenting their results in a variety of formats.

## **Math**

The Fraser Woods Middle School Mathematics Curriculum focuses on critical thinking, problem solving, and building a strong algebraic foundation. We differentiate to meet the developmental needs of our mathematical thinkers and understand that transitioning to abstract thinking can be challenging and that each student develops and excels at their own pace. We honor and celebrate the unique learning style each student possesses by using a variety of curriculums, manipulatives, and resources including but not limited to: Singapore Math, ALEKS, and Glenco Math.

In sixth grade, students take a Course 2 program. The overall goals of this course are to develop strong mathematical problem-solving skills, and reasoning skills, and a solid foundation in essential mathematical concepts and skills. The students will learn to work collaboratively by building on each others' ideas/understanding and challenging themselves and their group to identify multiple ways to approach and solve problems and justify their thinking.

In seventh grade, students take an accelerated Pre-Algebra course. This course builds a foundation of algebraic concepts through the use of manipulatives, problem solving, and cooperative learning. Concepts include algebraic expressions, linear equations, polynomials, factoring, inequalities, geometry, statistics, and graphing. Problem solving, reasoning, estimation, and connections between math and everyday applications are emphasized throughout the course.

The eighth grade students take an accelerated Algebra course that is designed to give students a foundation for all future mathematics courses. In this course, the fundamentals of algebraic problem-solving are explained. Students explore: foundations of Algebra, solving equations, solving inequalities, an introduction to functions, linear functions, systems of equations and inequalities, exponents and exponential functions, polynomials and factoring, quadratic functions and equations, radical expressions and equations, with some data analysis and probability.

## **Foreign Language**

### **French**

The Middle School French Program is divided into two classes: French One and French Two, the latter being the most advanced. The curriculum encourages realistic conversations that enable students to speak French as much as possible. The classroom environment helps students learn about different francophone cultures and students' dialogues are placed in a variety of settings according to our themes. In doing so, critical thinking and questioning is not merely allowed; it's encouraged.

In addition to our thematic studies, we cover the conjugation of the present, past and future tenses, the possessive adjectives, all other adjectives, adverb placement, negation, partitive and regular articles and sentence structure. This course enables students to speak French as much as possible using realistic conversations and dialogues placed in a variety of settings. Critical thinking and asking clarifying questions is encouraged.

### **Spanish**

The Middle School Spanish Program follows a method called "¡Avancemos!" which covers a variety of topics that are interactive from the start such as: greetings, food, articles of clothing, colors and numbers, telling time, traveling, house items and many more. This program also uses animated grammar explanations in each chapter.

The present, past and future tenses, possessive adjectives and all other adjectives, adverb placement, negation, articles and sentence structure are part of everyday lessons. We follow conversations and dialogues in a variety of settings. The book is online and the students can work from home or at school directly on a computer. Practice is encouraged every day and activities in the student book and workbook are helping students to learn the correct way of saying things. Matching games, hangman, word search and many other games are part of the student lessons. We also use the SMART Board to work with the online book.

## **Latin**

The Fraser Woods Middle School Latin Program provides the students with an insight into the structure of an inflected language and encourages them to make comparisons with their own language. These same students also develop a strong basis for the study of all the romantic languages, such as French, Spanish, Portuguese and Italian.

The curriculum gives the students an opportunity to learn about the past through written evidence and archeological remains. Students explore the life of Lucius Caecilius, in the city of Pompeii during the 1st century AD. Students learn this curriculum through practice in reading different texts about the life of Caecilius and his family.

The objectives are to study Latin mythology, featuring gods and goddesses, the history of Pompeii and the Roman Empire. Students interconnect English and Latin expressions and look for derivatives that follow the spelling.

## **Health**

The Middle School Health Program is divided into three separate age groups. All age groups cover the same topics, but each class has age-appropriate content and discussions. The curriculum covers physical, emotional, and social issues relevant to each age group.

## **Enrichment**

### **Music**

Taiko drumming, an ancient form of Japanese percussion, is the core of the music program for Middle School students. Our classes involve Taiko terminologies, discipline, posture, basic rhythm, traditional Taiko rhythms and Taiko choreography, developing students capability to perform on stage. This unique format provides our students not only with instruction in Taiko but also with opportunities for building creative expression, self-esteem, cultural awareness, and group cooperation.

There are four basic elements in Taiko that must come together as one unit throughout class. They are:

- *KARADA: Discipline of body strength, power, and stamina*
- *KOKORO: Discipline of mind, self control, and spirit*
- *WAZA: Musical skills, physical expressions, and rhythmic expression*
- *REI: Communication, manners, courtesy, respect, harmony, language, and unity of spirit*

Our music lessons also follow 9 guidelines of National Standards for Music Education.

### **Physical Education**

The Middle School students meet twice a week for 55 minutes at a time. The students learn about respectful interactions between peers while learning coordination during fun activities and games such as capture the flag and dodgeball. They are able to expand the capabilities of their bodies and learn how exercise can greatly benefit their growing bodies.

Students participate in an annual fitness test and learn about flexibility, endurance and strength exercises, which can be improved upon throughout the year.

Athletics meets 5 days a week and prepares students for team sports. The teams are co-ed and multi-age to fit the Montessori philosophy. To meet the needs of all athletes, intramural and competitive sports teams are offered during each season and include a variety of sports such as: basketball, softball and soccer. Emphasis is placed upon promoting a positive self-image, reciprocal teaching, peer-leadership and development of a healthy approach to competition. All students are able to play at a level that is comfortable for them and have the benefit of improving their skills by playing with students of varying abilities.

## **Makerspace**

Makerspace is our hands-on, cross-curricular classroom that encourages students to be creators and innovators. Our Makerspace curriculum integrates seamlessly with our Montessori classroom academics and builds lifelong skills that will prepare our students for success in their future endeavors. Our Makerspace is the center of discovery and collaboration within our school, where students are encouraged to create, experiment, imagine, fail and learn by doing.

The space features mobile work tables, robotics, 3D printers, tablets, laptops, green screen technologies, movie making, stop motion animation tools, circuitry, graphic design, and more. The tools and materials encourage our students to be creators, rather than consumers, of technology. Most importantly, the items found in our classroom are kid-sourced (our students influence each and every purchase we make!)

The Design Thinking Process guides our students through each of our inquiry-based classes where students find a myriad of opportunities that support personalized learning. Our Makerspace instills confidence in each of our students as they learn how to think entrepreneurially and ask questions without pause, improvising when necessary, taking risks regardless of failures, and asking for help or feedback routinely from their peers. The greater good is at the forefront, constantly. This culmination of invaluable skills will absolutely impact them positively in a future that is yet to be defined.

## **Visual Arts**

Students make weekly visits to the art studio and experience the works of master and contemporary artists, as well as lesser-known artists from other cultures. Visual Arts students learn about techniques and styles in art through examples or reproductions. They are then encouraged to use the inspiration to create their own unique projects. This develops a true appreciation for the elements of art as well as the artists studied.

Students have countless opportunities in our art studio to explore materials, including the clay wheel, in both traditional and non-traditional ways. Students are encouraged to experiment, take risks and express their feelings, opinions and ideas visually. They encounter the concepts of balance, space, texture, form, color and line. Although the curriculum varies from year to year, it is a key component in integrating classroom and cultural studies.

The Montessori philosophy allows for individual exploration in learning. Our art classes are set up to provide experiences that follow this philosophy and the six National Standards for the Visual Arts.

## **Cultural Program**

Students stage their own production—an activity many consider to be the highlight of the school year. For the annual performance, students participate in all aspects of production. Roles range from actors/singers/dancers to set/costume/lighting designers to performance directors. To help foster independence, students are encouraged to work out their own solutions as a group.