

# **2017 - 2018 MIDDLE SCHOOL PROGRAM**

The goals of our middle schools are the intellectual development and academic achievement of all students and the personal and social development of each student. Our middle schools feature an educational program that is comprehensive, challenging, purposeful, and integrated. All courses are aligned with the New York State Common Core Learning Standards for English Language Arts and Literacy in History/Social Studies, Science, and Technical subjects, as well as the Common Core Learning Standards for Mathematics.

## ***SIXTH-GRADE PROGRAM***

- A. English, social studies, mathematics, and science are full year courses.
- B. Music and physical education classes meet on alternate days for a full year. A student is scheduled for general music unless he or she has been recommended for band, chorus, or orchestra.
- C. Exploratory Courses – family and consumer science, health, technology and art.
- D. Full year alternate day courses include study skills, computers, world languages and Project Beyond for selected students.
- E. Coursework will emphasize discipline specific reading, writing, and vocabulary development.

## ***SEVENTH-GRADE PROGRAM***

- A. English, social studies, mathematics, science and world language are full year courses.
- B. Music and physical education classes meet on alternate days for a full year. A student is scheduled for general music unless he or she has been recommended for band, chorus, or orchestra.
- C. Exploratory Courses – family and consumer science, technology, online finance, art and health.
- D. Project Beyond is scheduled for selected students.
- E. Course work will emphasize discipline specific reading, writing, and vocabulary development.

## ***EIGHTH-GRADE PROGRAM***

- A. English, science, social studies, mathematics, and world languages are full year courses.**
- B. Music and physical education classes meet on alternate days for a full year. A student is scheduled for general music unless he or she has been recommended for band, chorus, or orchestra.**
- C. Course work will emphasize discipline specific reading, writing, and vocabulary development.**
- D. Exploratory Courses – technology and art.**
- E. Electives**
  - a. 4 - Your Future - If scheduling permits this elective option will enhance the total middle school explorations experience.**
  - b. Introduction to Research Methods - If scheduling permits, this elective option will prepare middle school students for future advanced research opportunities.**

## ***ACADEMIC SUPPORT SERVICES***

**Students identified as needing academic support may be scheduled for lab classes, workshops, or in a resource room/instructional support setting.**

# **ART**

## **ART 6**

In this alternate day, semester course, varied projects are designed to introduce new techniques and to build student confidence through the exploration of the elements and principles of art. Materials may include pencil, pen, paint, plaster, clay and fabric. These materials are used to creatively express feelings, and to apply problem-solving techniques to gain insight into our visual world. Students achieve readiness for critical thinking skills in Art 7.

## **ART 7**

Art 7 is a continuation of learning the elements and principles of art and meets on alternate days for the entire year. Decision-making, problem solving and thinking skills are applied to 2-dimensional and 3-dimensional activities. Concepts emphasized include one point perspective, sculpture, design, art appreciation, and drawing from observation. Interdisciplinary activities are incorporated into the curriculum.

## **ART 8**

The course includes a wide range of problem-solving assignments that further develop skills gained in Art 7. It meets on alternate days for the entire year. The assignments are designed to enhance student understanding of art history while experimenting with media such as paint, pastels, clay and computers. The elements and principles of art are explored on a more advanced level.

# **COMPUTER**

## **COMPUTER 6**

This full year alternate day course will teach students to be proficient in all computer applications. Skills to be mastered include keyboarding, word processing, spreadsheets, desktop publishing, presentation and movie making software. This course will update and expand safeguards regarding Internet Safety. Students will learn how to safely use web-based tools such as Google Apps for Education for research, writing, collaboration and as an organizational tool. Computer 6 students will use computers to participate in integrated team and school-wide activities. Students will create brochures, posters, greeting cards, spreadsheets and graphs for science projects, web quests and classroom presentations.

## **ONLINE FINANCE 7**

This alternate day semester course will explore the exciting world of finance using computer application programs (Word, Excel, PowerPoint) and other web-based apps and tools. . Students will examine career opportunities, paychecks and deductions, tax returns, budgeting, banking, credit and investing.

# **ENGLISH**

## **ENGLISH 6**

In English 6 students receive an additional 80 to 120 minutes per week of literacy instruction. The course focuses on developing students' reading comprehension, writing, critical thinking and language skills through the study of literary and informational texts (print and digital). Conceptual vocabulary and conventions are taught through a contextualized approach. Creative and explanatory writing are taught via the writing process. Additionally, the New York State Grade 6 Common Core English Language Arts Assessment will be administered in the spring.

## **STUDY SKILLS.COM 6: COMMUNICATION SKILLS FOR THE 21st CENTURY**

This course is designed to provide students with the skills necessary for a successful transition into the middle grades. Students will engage in lessons around topics such as organization, learning styles, active listening, note taking, study techniques and tools, writing, research, and effective communication. Students will learn strategies for success in all curricular areas, with a special emphasis on mathematics

## **ENGLISH 7**

English 7 centers on developing students' critical thinking skills using a multi genre approach (print and digital). Forms include poetry, narratives, essays, and articles. Writing involves analysis, reflection, and research supported with evidence from literary or informational sources. Emphasis is placed on citing accurate and relevant evidence. Revision and editing are integral components of composing. Integrated curriculum activities are conducted, with emphasis on academic vocabulary. Additionally, the New York State Grade 7 Common Core English Language Arts Assessment will be administered in the spring.

## **ENGLISH 8E**

English 8E continues to focus on enhancing students' proficiencies in reading and writing through in-depth examination and critique of literary and informational texts (digital and print). Research skills are further developed, with emphasis on presenting and supporting a perspective on a topic using accurate and relevant evidence from various sources. Revising and editing are integral components. Integrated curriculum activities and academic vocabulary are stressed. The course prepares students for the successful participation in English 9E or English 9H in the high school. Additionally, the New York State Grade 8 Common Core English Language Arts Assessment will be administered in the spring.

## **FAMILY AND CONSUMER SCIENCE**

### **FAMILY AND CONSUMER SCIENCE 6**

In this alternate day, semester course, students will be introduced to the preparation of healthy foods as defined by government guidelines. Etiquette, safety in the home, and personal development are explored. Students will study decision making, problem solving and management processes. Basic sewing skills will be introduced culminating in the production of a project. Community service-based projects are also included.

### **FAMILY AND CONSUMER SCIENCE 7**

In this alternate day, full year course, students will strive to become educated consumers. Comparative product testing, deceptive advertising, product safety, etiquette, and good nutrition are addressed. Intermediate sewing skills are studied. Students explore career awareness by participation in an entrepreneurship project. Community service-based projects are also included.

## **HEALTH EDUCATION**

### **HEALTH 6**

In this alternate day, semester course, students will be introduced to a variety of health topics that intertwine with character education. Wellness concentrates on the middle school transition and the importance of developing healthy decision making skills in all aspects of the students' lives. In a comfortable classroom environment, students learn about HIV, effective conflict resolution, digital citizenship, the changes involved in growth and development, and the dangers of drugs such as tobacco and alcohol. This is done through projects, activities, and class discussions.

### **HEALTH 7**

In this alternate day, full year course, students learn about the interdependence of the different aspects of health including the social, mental, emotional, physical and spiritual aspects. Students will be given updated health information regarding different issues that affect their health and well-being. The importance of decision making and resisting peer pressure is reinforced through activities, projects and discussions that require students to “think on their feet.” Topics to be focused on include self-esteem, stress management, conflict resolution, digital citizenship, disease prevention including lessons on HIV, and drug prevention.

## **WELLNESS 8**

Please see Physical Education section.

# **MATHEMATICS**

## **MATH 6**

The fundamental purpose of this course is to formalize and extend the mathematics that students have previously learned. Instruction focuses on four critical areas: (1) connecting ratio and rate to whole number multiplication and division and using concepts of ratio and rate to solve problems; (2) completing understanding of division of fractions and extending the notion of number to the system of rational numbers, which includes negative numbers; (3) writing, interpreting, and using expressions and equations; and (4) developing understanding of statistical thinking. Students will also build on their work with area in elementary school by reasoning about relationships among shapes to determine area, surface area, and volume. Additionally, the New York State Grade 6 Common Core Mathematics Assessment will be administered in the spring.

## **MATH 7-8**

The fundamental purpose of this course is to formalize and extend the mathematics that students have previously learned. Instruction focuses on topics from Common Core Math 7 and 8 such as: (1) developing understanding of and applying proportional relationships; (2) developing understanding of operations with rational numbers and working with expressions and linear equations; (3) solving problems involving scale drawings and informal geometric constructions, and working with two- and three-dimensional shapes to solve problems involving area, surface area, and volume; and (4) drawing inferences about populations based on samples. Additionally, the New York State Grade 7 Common Core Mathematics Assessment will be administered in the spring.

# MATH OPTIONS IN GRADE 8

Students must select between:

## A. MATH 8

The fundamental purpose of this course is to formalize and extend the mathematics that students have previously learned. Instruction focuses on three critical areas: (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equation and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three- dimensional and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem. Additionally, the New York State Grade 8 Common Core Mathematics Assessment will be administered in the spring.

OR

## B. ALGEBRA I CCSS

The purpose of this course is to extend the mathematics that students learned in Math 6 and Math 7-8. The students will study topics such as arithmetic and geometric sequences, linear, exponential and quadratic equations and inequalities. The students will develop fluency in writing, interpreting and translating various forms of these equations and inequalities. The use of the graphing calculator will be integrated throughout the curriculum. The combination of Math 7-8 and Algebra I CCSS are designed to prepare the students for the Algebra I CCSS Regents Examination and future course work in geometry. Students will receive one unit of high school credit for this course providing they pass the course and the Algebra I CCSS Regents Examination.

# MUSIC

## MUSIC 6

Music 6 is the first year of a three-year course sequence that offers a wide variety of musical experiences. The course includes instruction in the elements of music, notation, rhythm patterns, melody, harmony, style, and form. Emphasis is placed on singing, musical instruments, musical theater, and music related careers. Students will begin the World Drumming curriculum and will use hand chimes and the electronic keyboard laboratory to study music reading and performance.

## MUSIC 7

Music 7 is the second year of a three-year course sequence that offers a wide variety of musical experiences. The course continues instruction in the elements of music, notation, rhythm patterns, melody, harmony, style, and form. Emphasis is placed on electronic and computer music, classical music and composers, non-western music, and musical theater. Extensive use is made of the electronic keyboard laboratory and the World Drumming curriculum.

## **MUSIC 8**

Music 8 is the third year of a three-year course sequence that offers a wide variety of musical experiences. The course continues more advanced instruction in the elements of music, notation, rhythm patterns, melody, harmony, style, and form. Emphasis is placed on American music (patriotic songs, folk songs, jazz, ethnic music) and on the science of sound with electronic and computer music applications through the electronic keyboard laboratory. Instruction in basic music skills is continued.

## **BAND, CHORUS, AND ORCHESTRA 6, 7 & 8**

Performing groups provide students with an opportunity to learn music through active participation as performing musicians. Students may also study solos and work in small ensembles. Student musicians attend sectional lessons on a schedule that rotates throughout the school day. In sectionals, students learn technical exercises, study individual instruments and play in small ensembles. Music students are required to perform with their groups in evening concerts as well as in-school programs. Admission to individual performing groups is by audition or recommendation of the director.

# **PHYSICAL EDUCATION**

## **PHYSICAL EDUCATION (Grades 6, 7 & 8)**

New York State requires participation in physical education classes at each grade. The curriculum is based on supporting healthy behaviors including taking care of one's body, effective goal setting, and proper sporting behavior.

The Physical Education program includes instruction and participation in individual sports, team sports, physical fitness and Project Adventure. Curriculum progression is incorporated for each activity at each grade level. Overall, the goal of the program is to encourage lifetime fitness and activity. Students will incorporate the knowledge and skills learned in class into their own lives.

The Sport Education model is utilized in certain units in the upper grades. Students are given responsibilities to actively run each unit. This may include being a/an: equipment manager, coach, statistician, official and/or publicist. This model supports the importance of each individual in the class and reinforces the notion that students of all ability levels add to the success of the group.

Adventure education is also incorporated within each grade to allow for cooperative learning. Lessons deal with group decision making and trust activities which allows for a supportive environment in other units.

In the eighth grade, a Wellness unit is introduced supporting healthy decision-making skills in all aspects of the students' lives. Students actively engage in discussions while role playing topics such as respect, diversity, problem solving, peer pressure issues and conflict resolution.

An Adapted Program is also available for students with special needs. Students are given individual instruction and/or assistance in general PE classes.

## **SCIENCE**

### **SCIENCE 6**

The sixth grade science program focuses on the study of life science. This course includes a study of cells, heredity, body systems, plants, invertebrates, vertebrates, and the environment. The students will be introduced to a variety of laboratory experiences that will foster an understanding of the scientific method and laboratory skills.

### **SCIENCE 7**

The seventh grade science program involves the study of physical science. This course includes the study of matter, atoms, motion and force, work, machines and energy, the periodic table, physical reactions, chemical reactions, and astronomy. The students will be introduced to a variety of laboratory experiences that enhance classroom instruction.

## SCIENCE OPTIONS IN GRADE 8

Students must select between:

### A. SCIENCE 8

The eighth grade science program will emphasize the Three Dimensions of the Next Generation Science Standards (crosscutting concepts, inquiry-based learning, and disciplinary core ideas) while meeting the New York State Science Learning Standards. Science 8 will build upon the current spiraled science curriculum in grades 6 and 7 and include an emphasis on STEM principles. The focus will be on elements of the living environment and the physical setting such as ecology, astronomy, meteorology, and geology. This course prepares enrolled 8th grade students for future participation in high school laboratory science courses beginning in grade 9. Additionally, the New York State Grade 8 Intermediate Science Assessment will be administered in the spring.

OR

### B. THE PHYSICAL SETTING / EARTH SCIENCE

This is a N.Y.S. Regents course. Students explore the physical laws of nature by studying the Earth and its place in the Universe. Topics include the universe and solar system, weather, Earth, and rocks and minerals. Laboratory work is a part of this course. All students take the Regents examination at the conclusion of the course. Students will receive one unit of high school credit for this course providing they pass the course and the Earth Science Regents Examination.

**For the Earth Science Regents examination, 1300 minutes of hands-on laboratory work with satisfactory reports is required for entrance into the Regents examination, to pass the course and/or to retake the course in summer school.**

## SOCIAL STUDIES

### SOCIAL STUDIES 6

Students will study the history, government, geography, and cultures of selected eastern hemispheric ancient and classical civilizations. They will focus on the cultural influences these societies had on western culture and thought. Research opportunities will connect these civilizations of the ancient world with current events shaping the modern world.

## **SOCIAL STUDIES 7**

Students will be introduced to a two year course of study in American history and geography that chronologically begins with the Age of Exploration and continues through the Reconstruction period. This course provides students with the necessary tools to make decisions, solve problems, understand the democratic process, interpret data, and become aware of issues and policies impacting national, state, and local governments. Particular emphasis and focus will be given to topics such as colonization of the New World, Native Americans, the American Revolution, government in action, westward expansion, and the Civil War. The skills learned in Social Studies 7 are the building blocks for success in Social Studies 8.

## **SOCIAL STUDIES 8E**

Students taking Social Studies 8E continue the study of American History from the end of Reconstruction to the present time. Students will study the following topics: industrialization, immigration, progressivism and reform, World War I, the Great Depression, World War II, the Cold War, and contemporary America. Students will engage in the development of comprehension and writing skills through primary source readings and inquiry based research projects. Analysis, critical thinking, and persuasive writing are reinforced throughout the year as part of vertical integration with Global History 9E, AP World History I, and AP World History in the high school.

# **TECHNOLOGY**

## **GRADE 6 INTRODUCTION TO TECHNOLOGY/STEM EXPLORATION**

Introduction to technology is a 10 week course offered to all sixth grade students. Through STEM related activities that include reading, writing, problem-solving challenges, hands-on experiences, mind engaging activities, and discussions students will learn how technology developed through the ages, and how it influences our lives today. Students will develop an understanding of how technology continues to grow at an exponential rate due to the vast amount of information that is accessible today.

## **GRADE 7 TECHNOLOGY/STEM EXPLORATION**

Students will broaden their knowledge while learning to integrate relevant topics about STEM applications while participating in real-life collaborative, cooperative, and competitive activities. This hands-on course provides an introduction to the world of energy that includes digital photography, web page design, virtual modeling, engineering of solar and battery powered cars.

## **GRADE 8 TECHNOLOGY/STEM EXPLORATION**

This course involves a variety of STEM activities where students will design, engineer and test solutions to problems. Using a cloud-based virtual modeling STEM application students design, analyze, and create manufacturing outputs for CO<sub>2</sub> powered dragsters in a virtual race. Using creative and critical thinking skills while applying classroom learning students engineer their own CO<sub>2</sub> powered dragster. This hands-on course develops a practical understanding for safety, technical drawing, design and engineering.

# **WORLD LANGUAGE**

Students have the option to select French, Italian or Spanish for their language sequence. At the middle school students complete Checkpoint A of the New York State Curriculum. The two standards for LOTE (Languages Other Than English) are communication and culture. Students build their communicative skills in speaking and writing and develop listening and reading comprehension skills. Students also develop an appreciation and awareness of the target culture and their own culture. The New York State Education Department has organized the curriculum into 14 thematic topics: Personal Identification, Family Life, House and Home, Education, Community and Neighborhood, Food and Meal-Taking, Shopping, Health and Well Being, Earning a Living, Physical Environment, Leisure, Public and Private Services, and Travel. Students study these topics throughout their years in middle school.

## **WORLD LANGUAGE 6**

Students are introduced to the target language and culture. The curriculum focuses on developing listening and speaking skills through various communicative and interactive activities. In Grade 6 World Language classes meet on alternate days.

## **WORLD LANGUAGE 7 and 8**

Students develop the four language skills of listening, reading, writing and speaking. The students acquire these skills through the thirteen vocabulary topics. The students engage in a variety of student-centered interactive activities, projects and presentations. Students who successfully complete two units of study in a language other than English in middle school and pass the final examination aligned with Checkpoint A in Grade 8 will receive one high school credit and continue on to Level 2 in high school.

## **PROJECT BEYOND**

### **PROJECT BEYOND 6**

This enrichment course is for students who have been identified as meeting the criteria for Project Beyond. By focusing on higher level thinking and study skills, students will become more successful problem solvers and critical thinkers. Students will use a variety of activities and techniques to master these skills.

### **PROJECT BEYOND 7**

This is an enrichment course for all students who have been identified as meeting criteria for Project Beyond. The goal of the course is to enhance creative and intellectual leadership abilities. Project Beyond is a ten-week segment of Exploration 7 that select students take in place of Online Finance 7.

## **SCHOOLWIDE ENRICHMENT PROGRAM**

The goal of the school-wide enrichment program is to provide an opportunity for students to engage in self-authored and self-initiated learning experiences. Students will develop their multiple talents in a variety of ways and in a variety of curriculum areas. The enrichment specialist works with students and teachers to enhance students' ability to think critically about concepts and creatively solve problems independently and in their academic classes.

### **4 YOUR FUTURE**

This year-long alternate day course is designed to allow eighth grade students to explore units of study in the areas of Family Consumer Science, Art, Business, and Technology. It will afford students the opportunity to build valuable skills while gaining insight into further options for study at the high school. This enrichment option will enhance the total middle school explorations experience.

## **INTRODUCTION TO RESEARCH METHODS**

This year long alternating day course enables students to apply interests, knowledge, creative ideas, critical thinking and research skills to a selected problem and to produce an individual research project. The skills and strategies taught will focus on evaluating resources, selecting a topic, investigating, creating, organizing and writing an in-depth research paper.