



# McCarthy Middle School

250 North Road - Chelmsford, Massachusetts 01824 - 978-251-5122



## Course of Studies

Grades 5, 6, 7 & 8

2022-23

## MIDDLE SCHOOL COURSE OFFERINGS

### Grade 5 & 6 Course Offerings

Department	Course	Course Number
Art	Studio Art 5 Studio Art 6	851 861
Health	Health Education 5 Health Education 6	954 964
Language Arts/English	Language Arts 5 Language Arts 6	051 061
Reading	Literacy Support 5 Literacy Support 8	573 583
Mathematics	Math 5 Math 6	251 261
Music	Band 5/6 Orchestra 5/6 Chorus 5/6 Music Concepts & Cultures 5/6	1451/1461 1351/1361 1551/1561 0651/0661
Physical Education	Physical Education 5 Physical Education 6	970 980
Science	Science 5 Science 6	351 361
Social Studies	United States History World Studies I	451 461
Specialists	Computer 5/6 Library 5/6	1251/1261 1151/1161

## **Grade 5 Course Offerings**

### **Band 5**

Students in Grade 5 Band meet for regularly scheduled classes during the school day. Instruments are taught in a group setting. Taking outside private lessons is strongly encouraged but not required. Students have the option of choosing to play the flute, clarinet, trombone, or trumpet as they enter grade 5.

Instruments, accessories (i.e. reeds, oil, music stands for home practice), and lesson book/Smart Music subscription are to be supplied by the parents. The Band performs at some or all of the following events during the school year: in-school and evening concerts, assemblies, music festivals, CHS Band Night, and parades. These performances are the culminating activities of classroom learning and, as such, are important events in the curriculum. Students are expected to attend these performances.

All students entering the Grade 5 Band program are required to attend the Instrument Test Drive event in June of their 4<sup>th</sup> grade year unless transferring from out of district.

### **Chorus 5**

Students in Grade 5 Chorus meet for regularly scheduled classes during the school day and learn to sing music of varying genres in multiple parts. Students also develop music literacy and sight-reading and solfege skills.

The Chorus performs at some or all of the following events during the school year: in-school and evening concerts, assemblies, and music festivals. These performances are the culminating activities of classroom learning and, as such, are important events in the curriculum. Students are expected to attend these performances.

### **Computer 5**

The fifth grade computer curriculum emphasizes basic vocabulary and sound computing practices. At present, students make the transition from elementary school to middle school with some computer experience. The fifth grade course builds on that foundation level. During the year the emphasis is on integrating thematic core subject curriculum projects while developing word-processing and elementary desktop publishing skills. Students enter, edit, illustrate, format, save and print work. Other activities involve organizational skills, some elementary research techniques and beginning draw/paint skills. Students work individually for skill acquisition, but may work in groups to complete multi-step tasks or projects. The computer curriculum is revised on an ongoing basis to reflect the addition of new equipment/applications both at the middle and elementary school levels and is consistent with the Competency Frameworks suggested by the Massachusetts Benchmark Standards Project.

### **Health 5**

Fifth grade is an introduction to health. Students will continue the Second step program; they will learn to take the problem solving strategies taught at the elementary level and learn more advanced skills in order to resolve conflicts and make healthy choices. Empathy, anger management and problem solving strategies will be taught. In addition to second step students will learn about hygiene, the immune system, nutrition, fitness, and helmet safety.

## **English Language Arts 5**

This reading/language arts course is a fully integrated literature-based program. Students use an instructional text, the anthology, and read a variety of pieces which include short stories, poetry, drama and non-fiction. Novels, newspapers, periodicals and non-print media are also used. Specific literary terms and vocabulary are addressed within the context of their reading. Students are taught to be strategic readers and encouraged to read for different purposes. Activities include sharing and talking about books and responding to information.

Students engage in the writing process, and special emphasis is given to answering open response questions in preparation for the MCAS test. Much of the writing focuses on classroom readings, and students also write several types of essays throughout the year. Grammar, usage, mechanics and spelling are taught in connection with the writing. All students have a writing portfolio, and these records are passed on to grade 6 teachers.

This program provides structure, a community learning experience, and support for **all** students - strong independent readers, students who are working towards independence, and students who still require support.

## **Library 5**

The library curriculum in grade five focuses on building skills learned in the elementary school libraries while adding new information literacy skills. As students move from grade four to grade five, they will have covered some of the basics, such as navigating through the library, knowing why books are assigned numbers, searching for books and other resources in our automated library system, knowledge of the parts of a book, as well as using some of the online resources. In grade five, more information literacy skills are introduced. Searching for information, creating properly formatted bibliographic citations for resources used, evaluating information, and note taking skills are only a few of the many topics covered and skills learned. Author studies and literacy activities are also part of the library curriculum at this grade level. The curriculum is based on the document *Standards for the 21<sup>st</sup> Century Learner* published by the American Association of School Librarians.

## **Mathematics 5**

All students will engage in the standards for mathematical practice: Problem Solving, Arguments, Constructing Arguments, Modeling, Using Math Tools, Precision, Structure, and Reasoning as they investigate the following mathematical domains: Operations and Algebraic Thinking, Numbers and Operations in Base Ten, Numbers and Operations in Fractions, The Number System, Measurement and Data & Geometry.

The summer math practice is assigned through Study Island and is located on the district's web site. Students should complete the assignments prior to the first week of school.

## **Music Concepts and Cultures 5**

The grade five Music Concepts and Cultures curriculum includes the study of the elements of music melody, harmony, rhythm, texture, timbre, expression, and form. Students will explore a variety of cultural and historical aspects of music. This course will emphasize the application of these concepts and studies through individual and group projects, displays, and presentations.

Connections with other academic subjects will be incorporated when applicable and appropriate. This course will provide the skills and tools needed for students to acquire a lifelong appreciation of music.

## **Orchestra 5**

Instruction on string Orchestra instruments (violin, viola, cello and string bass) begins in Grade 5 for students who wish to learn to play a string instrument. Students in Grade 5 Orchestra meet for regularly scheduled classes during the school day. Instruments are taught in a group setting. Taking outside private lessons is strongly encouraged but not required. Grade 5 students who have begun private instruction previously are also invited to participate. Instruments, accessories (i.e. rosin, music stands for home practice), and lesson book/Smart Music subscription are to be supplied by the parents.

All students entering the Grade 5 Orchestra program are required to attend the Instrument Test Drive event in June of their 4<sup>th</sup> grade year unless transferring from out of district.

The Orchestra performs at some or all of the following events during the school year: in-school and evening concerts, assemblies and music festivals. These performances are culminating activities of the classroom curriculum and, as such, are important events in the curriculum. Students are expected to attend these performances.

## **Physical Education 5**

The goal of the Physical Education curriculum is to provide transitional units developmentally appropriate to the young adolescent learner. Skills and an introduction to modified games are the focus for this age group. Participation in individual and team sports, as well as fitness and recreational activities are offered. Activities offered include: fitness, soccer, ultimate football, field hockey, badminton, basketball, team handball, floor hockey, softball, volleyball, tumbling, track and field, dance, yoga, tennis, project adventure and New Games. The program stresses the development of skills, knowledge, and attitudes necessary for enjoyment and success in a variety of activities.

Students may further enhance their skills through the intramural programs offered throughout the year.

## **Science 5**

The fifth grade science program provides the student with experiences in the Life, Earth, Physical and Environmental Sciences. Science and Technology Kit activities, projects, library research, computers, demonstrations, audio/visual materials, science field trips, assembly programs, classroom discussion, individual and cooperative group experiences are employed in the study of units on Ecosystems, Endangered Species, Water and Electric Circuits.

## **United States History**

Building on their knowledge of North American geography and peoples, students learn more about the history of the colonies, the American Revolution, the development of the Constitution, Bill of Rights, the early Republic, and the westward expansion of the United States. They study the sectional conflicts over slavery that led to the Civil War and the long struggle in the 19th and 20th centuries for civil rights for all.

## **Studio Art 5**

Students will learn the concepts and skills of design, composition, color, and drawing, and explore them by employing creativity, self-expression, and critical thinking in the use of various media. The curriculum will introduce aesthetics and art history and promote integration with other academic disciplines.

## **Grade 6 Course Offerings**

## **Band 6**

Instrumentalists who have successfully completed a beginning Band program at grade 5 are encouraged to continue in the grade 6 Band. Students who did not participate in grade 5 Band but are able to demonstrate the appropriate skills for this level may participate with the permission of the instructor. Grade 6 Band is not designed for beginning wind and percussion students, and private lessons are strongly encouraged beginning at this grade level. Band is a regularly scheduled class. The Band performs at some or all of the following events during the school year: in-school and evening concerts, assemblies, music festivals and parades. These performances are the culminating activities of classroom learning and, as such, are important events in the curriculum. Students are expected to attend these performances. Instruments, accessories, and lesson book/Smart Music subscription are to be supplied by the parents.

## **Chorus 6**

Students who enjoy singing are invited to participate in Chorus. Chorus is a regularly scheduled class. The Chorus performs at some or all of the following events during the school year: in-school and evening concerts, assemblies and music festivals. These performances are the culminating activities of classroom learning and, as such, are important events in the curriculum. Students are expected to attend these performances. Students who excel will be invited by the choral director to audition for the Massachusetts Music Educators Association Northeastern Junior District Festival.

## **Computer 6**

The sixth grade computer curriculum continues to develop student skills. During the year students refine and expand word-processing and desktop publishing skills. Students are introduced to database, spreadsheet and draw environments. Integrated thematic core subject curriculum projects require the application of concepts in each of these areas. Activities involve organizational skills, research techniques and specific competencies in word-processing, database, spreadsheet, and/or drawing. Students work individually for skill acquisition, but may work in groups to complete multi-step tasks or projects. Computer curriculum is revised on an on-going basis to reflect the addition of new equipment/applications both at the middle and elementary school levels and is consistent with the Competency Frameworks suggested by the Massachusetts Benchmark Standards Project.

## **Health 6**

Sixth grade health addresses a variety of important wellness topics. Students will continue to learn, practice and model effective problem solving strategies and anger management skills through our Second Step Curriculum and group role plays. In addition to Second Step, students will access information and gain knowledge on the following topics: proper nutrition, conflict resolution, living tobacco free, sun safety, and other relevant current health topics. Lastly, students will have the opportunity to participate in the Maturation Unit. This unit is approximately 6-8 weeks and requires positive parent permission. Parents and guardians will be invited to a Maturation Curriculum Night to further discuss the program.

## **English Language Arts 6**

This reading/language arts course is a fully integrated literature-based program where reading, writing, speaking and listening are taught. Students use an instructional text, the anthology, and read a variety of pieces which include short stories, poetry, drama and non-fiction. Novels, newspapers, periodicals and non-print media are also used. Specific literary terms and vocabulary are addressed within the context of their reading. Students are taught to be strategic readers and encouraged to read for different purposes. Activities include sharing and talking about books and responding to information. Students are required to participate in the summer reading program.

Students engage in the writing process, and special emphasis is given to answering open response questions in preparation for the MCAS test. Much of the writing focuses on classroom readings, and

students write several types of essays in response to the literature. Grammar, usage, mechanics and spelling are taught in connection with the writing. In addition, students may experience journal and diary writing and other free writing opportunities. Creative writing in prose, poetry, drama, and writing for fun are other alternatives students may explore. A special project, *I Search*, is assigned in grade 6. Students are taught research and speaking skills and in a culminating event, they present the research report to their peers. All students have a writing portfolio, and these records are passed on to grade 7 teachers.

This course is a continuation of the grade 5 program. It provides structure, a community learning experience, and support for **all** students - strong independent readers, students who are working towards independence, and students who still require support.

### **Library 6**

Students in grade six library classes continue to master Information Literacy Skills. Evaluating information is a big part of the curriculum, as is digital citizenship (including online safety), copyright awareness, and continued work on properly citing sources. More time is spent in grade six with students on developing smart search strategies, with the proper use of keywords in searching for information. Plagiarism is discussed at a deeper level, and working with students at this grade level on avoiding plagiarism is a key component of the curriculum. Literacy activities and author studies continue as recreational reading is encouraged. The curriculum is based on the document *Standards for the 21<sup>st</sup> Century Learner* published by the American Association of School Librarians.

### **Mathematics 6**

All students will engage in the standards for mathematical practice: Problem Solving, Arguments, Constructing Arguments, Modeling, Using Math Tools, Precision, Structure, and Reasoning as they investigate the following mathematical domains: Ratios and Proportional Relationships, The Number System, Expressions and Equations, Geometry, & Statistics and Probability.

The summer math practice is assigned through Study Island and is located on the district's web site. Students should complete the assignments prior to the first week of school.

### **Music Concepts and Cultures 6**

The grade six Music Concepts and Cultures curriculum includes the study of the elements of music - melody, harmony, rhythm, texture, timbre, expression and form. Students will explore a variety of cultural and historical aspects of music. This course will emphasize the application of these concepts and studies through individual and group projects, displays, and presentations.

Connections with other academic subjects will be incorporated when applicable and appropriate. This course will provide the skills and tools needed for students to acquire a lifelong appreciation of music.

### **Orchestra 6**

Instrumentalists who have successfully completed the Grade 5 Orchestra program are encouraged to continue in the Grade 6 Orchestra. Students who did not participate in Grade 5 Orchestra but are able to demonstrate the appropriate skills for this level may participate with the permission of the instructor. Grade 6 Orchestra is not designed for beginning string students. Orchestra is a regularly scheduled class. Private lessons are strongly encouraged at this grade level. The Orchestra performs at some or all of the following events during the school year: in-school and evening concerts, assemblies and music festivals. These performances are the culminating activities of classroom learning and, as such, are important events in the curriculum. Students are expected to attend these performances. Instruments, accessories (i.e. rosin, music stands for home practice), and lesson book/Smart Music subscription are to be supplied by the parents.

## **Physical Education 6**

Physical Education includes participation in individual and team sports as well as fitness and recreational activities. Activities offered include: touch football, speedball, field hockey, badminton, wrestling, recreational games, basketball, team handball, floor hockey, softball, volleyball, tumbling, obstacle course, track and field, soccer, tennis, Project Adventure, and New Games. The program stresses the development of skills, knowledge, and attitudes necessary for enjoyment and success in a variety of activities.

Students may further enhance their skills through the intramural programs offered throughout the year.

## **Science 6**

The sixth grade general science program provides the student with experiences in the Life, Earth, Physical and Environmental Sciences. Experiments, demonstrations, projects, labs, research reports and field studies play an important role in the development of research skills and scientific knowledge. Periodicals, various audio-visual materials, and computer programs are also used to bring the latest scientific thinking and problem-solving expertise into the classroom.

## **Social Studies 6**

Sixth grade students examine how the perspectives of political science, economics, geography, history, and archaeology apply to the study of regions and countries. They study the development of prehistoric societies and then focus on area studies of Western Asia, the Middle East, North Africa, Sub-Saharan Africa, and Central America, the Caribbean Islands, and South America. Grade 7 examines the physical and political geography and ancient societies of South and East Asia, Oceania, and Europe as well as an investigation of major religions throughout the first millennium.

## **Studio Art 6**

Students will learn the concepts and skills of design, composition, color and drawing, and be given opportunities to explore them by employing creativity, self-expression, and critical thinking through the use of various media. The curriculum will introduce aesthetics, art history, and will promote integration with other academic classrooms.

Through the construction of masks, textiles, sculptures, prints, and the use of various media, students will study the cultures of Europe, Africa and the Middle East including Egypt.

## **FIFTH AND SIXTH GRADE LITERACY SUPPORT PROGRAM**

This course is designed to provide additional support for students who are experiencing difficulty reading and writing at grade level. Emphasis is placed on content area reading strategies including understanding the text structure of textbooks, using literature to make relevant connections to content instruction, writing in response to reading, and test taking strategies. Selected texts focus on vocabulary development and content area background knowledge to support students in their subject area classes.

Students in grades five and six take Literacy Support classes three days a week during the arts and specialist blocks. Students in grade five are recommended for the course by elementary reading specialists and fourth grade classroom teachers, while grade six students are recommended by the grade five and six reading specialist and fifth grade classroom teachers.

## **Grade 7 & 8 Course Offerings**

<b>Department</b>	<b>Course</b>	<b>Course Number</b>
Art	Art 7 Art 8	871 881
Health	Health Education 7 Health Education 8	974 984
Language Arts/English	Language Arts 7 Language Arts 8	071 081
Reading	Literacy Support 7 Literacy Support 8	573 583
Mathematics	Honors 7 <sup>th</sup> Grade Math Accelerated 7 <sup>th</sup> Grade Math 7 <sup>th</sup> Grade Mathematics Honors Geometry Accelerated 8 <sup>th</sup> Grade Math 8 <sup>th</sup> Grade Mathematics	270 271 272 280 281 282
Music	Band 7/ 8 Orchestra 7/8 Chorus 7/8	1471/1481 1371/1381 1571/1581
Physical Education	Physical Education 7 Physical Education 8	970 980
Science	Life Science 7 Earth Science 8	371/375 381/385
Social Studies	World Studies II Foundations of Democracy	471/475 481/485
Technology Engineering	Technology Engineering 7 Technology Engineering 8	771 781
World Language	Introductory French French 8 Introductory Spanish Spanish 8	1711 1811 1721 1821
Team Time/ Non-Performance Music Extension	Team Time 7 Team Time 8 NPM Extension 7 NPM Extension 8	1071 1081 0777 0778

The minimum number of students to justify a class offering will be determined by the principal.

## **ART**

### **Art 7/8 (871 & 881)**

In the art classes, students will have a hands-on experience drawing, painting and constructing their own solutions to a number of design problems. A variety of art media and art styles will be explored throughout the term. Students will expand their knowledge, application, art elements, design elements, and art history with a variety of mediums. Students will have the opportunity to work on a variety of 2-D and 3-D projects.

## **HEALTH**

### **Health - 7 (974)**

This course is based on the Glencoe Teen Health series. The goal of this course is to help lay the foundation for building life-long health skills in order to make positive health choices. Students will continue with the Second Step Curriculum. Additional topics that are covered include: healthy relationships, body image and self-esteem, technology and decision making, disease and illness, and nutrition and disordered eating. Students will also work closely with their peers, health teacher, and guidance counselor on the Signs Of Suicide (SOS) Program. This program assists students in recognizing the signs of mental health concerns, self-injury, and suicide. Other relevant current health topics will be addressed.

### **Health - 8 (894)**

Eighth grade is based on the Glencoe Teen Health series. The goal of this course is to help lay the foundation for building life-long health skills in order to make positive health choices. Students will also continue with the Second Step Curriculum. Additional topics that will be covered are: stress, nervous system, mental health, alcohol and drug awareness, and human sexuality. Students will also work closely with their peers, health teacher, and guidance counselor on the Signs Of Suicide (SOS) Program. This program assists students in recognizing the signs of mental health concerns, self-injury, and suicide.

## **LANGUAGE ARTS/ ENGLISH**

Each of the Language Arts/English courses offered at the middle school level contains the following components:

1. Literature Analysis and Appreciation
2. Composition
3. Grammar Skills Review and Development
4. Vocabulary Development
5. Spelling Reinforcement

In grades five and six, Literature Enrichment is a separate subject, while in grades seven and eight literature is part of the English class. As a general policy, homework is assigned regularly. To succeed in any class, the student must complete all assignments promptly, accurately and neatly.

### **English Language Arts 7 (071)**

This course is designed to meet the needs of all students. Students read challenging classical and contemporary pieces in an anthology which include short stories, poetry, drama and nonfiction. Novels that appeal to the adolescent are also used. Specific literary terms are taught, and vocabulary is addressed within the context of their reading. Since seventh grade students should not be hindered by problems in

reading or basic comprehension, the curriculum often centers on independent study assignments requiring original, logical thinking and an inquiring mind. Students are required to participate in the summer reading program.

Students engage in the writing process and special emphasis is given to answering open response questions, analytical writing and the personal essay which help prepare students for the MCAS test. Spelling and grammar are taught in connection with the students' writing. Students maintain a classroom writing portfolio in an effort to measure their growth and development in composition. At the end of the year this portfolio is sent to the 8<sup>th</sup> grade English teachers.

Speaking skills are addressed through recitation of poetry, reading original writing pieces, and participating in literature circle discussions.

Students are expected to complete much of the work on their own with a minimum of direction, reserving class time for discussion and analysis of topics under scrutiny. Students should expect homework several times per week. Many class lessons will be contingent on homework completion. Therefore, due to the type and amount of work covered, students must exhibit maturity and self-discipline in order to succeed. It is important to note that students need to maintain high grades and meet several other criteria to be placed in English 8 Honors.

### **English Language Arts (081)**

This course is designed to meet the needs of all students and builds upon the seventh grade curriculum to prepare students for high school success. The study of literature explores all genres, including short story, poetry, novel, non-fiction and drama. The novels selected serve as a focus for discussion and writing assignments. A major theme for eighth grade reading is coming of age, and the selections help prepare students to make effective choices in life. Speaking skills are also developed in literature circle discussions and other oral communication assignments.

Students engage in the writing process and produce a variety of writing pieces with special emphasis given to answering open response questions, analytical writing and literary analysis which help prepare students for the MCAS test. Instruction continues in grammar, spelling, and sentence structure within the context of students' writing. Students maintain a writing portfolio in an effort to maintain their own growth and development in composition. At the end of the year this portfolio is sent to the 9<sup>th</sup> grade English teacher.

Students will be expected to complete much of the work outside of class with a minimum of direction, reserving class time for discussion and editing. Many class lessons are contingent on homework completion; therefore, students will assume more personal responsibility for their learning. The grade eight curriculum is designed to provide students with the background to achieve success in grade nine. It is important to note that students need to maintain an A average, have excellent writing and study skills, and receive teacher recommendation to participate in the honors selection process for grade nine.

## **READING 7 AND 8**

### **Literacy Support 7 and 8 (573/583)**

This course is designed to provide additional support for students who are experiencing difficulty reading and writing at grade level. Emphasis will be placed on content area reading strategies including understanding the text structure of textbooks, using literature to make relevant connections to content instruction, concept mapping of content area vocabulary, analysis and synthesis of ideas through written summaries, and test taking strategies. Selected texts focus on vocabulary development and content area background knowledge to support students in their subject area classes.

Students in grade seven and eight take Literacy Support classes five days a week in place of foreign language. Placement in the course is determined in the spring through a variety of instruments including nationally normed standardized tests, authentic assessment measures in both reading and writing, a

developmental spelling assessment, Reading/Language Arts MCAS scores, classroom teacher recommendations, and past participation in Reading or Literacy Support classes. Students taking Literacy Support in grade seven will continue the course in grade eight and begin foreign language instruction in grade nine at Chelmsford High School.

## **MATHEMATICS**

### **Honors 7<sup>th</sup> Grade (270)**

All students will engage in the standards for mathematical practice: Problem Solving, Arguments, Constructing Arguments, Modeling, Using Math Tools, Precision, Structure, and Reasoning as they investigate the following mathematical domains: Ratios and Proportional Relationships, The Number System, Expressions and Equations, Geometry, & Statistics and Probability.

In addition, students will cover the following 8<sup>th</sup> grade domains: The Number System, Geometry, & Statistics and Probability.

The summer math practice is assigned through Study Island and is located on the district's web site. Students should complete the assignments prior to the first week of school.

### **Accelerated 7<sup>th</sup> Grade Math (271)**

All students will engage in the standards for mathematical practice: Problem Solving, Arguments, Constructing Arguments, Modeling, Using Math Tools, Precision, Structure, and Reasoning as they investigate the following mathematical domains: Ratios and Proportional Relationships, The Number System, Expressions and Equations, Geometry, & Statistics and Probability. This course will move at a faster pace than the 7<sup>th</sup> Grade Mathematics Course, but yet will have the same core curriculum.

The summer math practice is assigned through Study Island and is located on the district's web site. Students should complete the assignments prior to the first week of school.

### **7<sup>th</sup> Grade Mathematics (272)**

All students will engage in the standards for mathematical practice: Problem Solving, Arguments, Constructing Arguments, Modeling, Using Math Tools, Precision, Structure, and Reasoning as they investigate the following mathematical domains: Ratios and Proportional Relationships, The Number System, Expressions and Equations, Geometry, & Statistics and Probability.

The summer math practice is assigned through Study Island and is located on the district's web site. Students should complete the assignments prior to the first week of school.

### **Honors Algebra I (280)**

Students who have successfully completed Honors mathematics in grade 7 will be recommended to take Algebra I in grade 8. This course is focused on the 8<sup>th</sup> and 9<sup>th</sup> grade Algebra I standards from the Common Core. Students are exposed to highly motivating and relevant problems that offer the depth and rigor needed to prepare them for Calculus and other college-level courses that will be studied during their senior year.

All students will engage in the standards for mathematical practice: Problem Solving, Arguments, Constructing Arguments, Modeling, Using Math Tools, Precision, Structure, and Reasoning as they investigate the following mathematical domains: Number & Quantity, Algebra, Functions, Geometry, and Statistics & Probability.

### **Accelerated 8<sup>th</sup> Grade Math (281)**

All students will engage in the standards for mathematical practice: Problem Solving, Arguments, Constructing Arguments, Modeling, Using Math Tools, Precision, Structure, and Reasoning as they investigate the following mathematical domains: The Number System, Expressions and Equations, Functions, Geometry, & Statistics and Probability. This course will move at a faster pace than the 8<sup>th</sup> Grade Mathematics Course, but yet will have the same core curriculum. Students will be prepared to take a full Algebra I course in 9<sup>th</sup> grade.

The summer math practice is assigned through Study Island and is located on the district's web site. Students should complete the assignments prior to the first week of school.

### **8<sup>th</sup> Grade Math (282)**

All students will engage in the standards for mathematical practice: Problem Solving, Arguments, Constructing Arguments, Modeling, Using Math Tools, Precision, Structure, and Reasoning as they investigate the following mathematical domains: The Number System, Expressions and Equations, Functions, Geometry, & Statistics and Probability. Most of the students will be prepared to take a full year Algebra I course in 9<sup>th</sup> grade.

## **MUSIC**

### **Band 7 and 8 (1471 & 1481)**

Instrumentalists who have successfully completed the grade 6 Band program are encouraged to continue in the grade 7/8 Band. Students who did not participate in grade 5 or grade 6 Band but are able to demonstrate the appropriate skills for this level may participate. Band is a regularly scheduled class. Grade 7/8 Band is not designed for beginning wind and percussion students. Private lessons are encouraged at this grade level. The Band performs at some or all of the following events during the school year: in-school and evening concerts, assemblies, music festivals, and parades. These performances are the culminating activities of classroom learning and, as such, are important events in the curriculum. Students are expected to attend these performances. Students who excel will be invited by the Band director to audition for the Massachusetts Music Education Association Northeastern Junior District Festival. Instruments, accessories, and lesson book/Smart Music subscription are to be supplied by the parents.

### **Chorus 7 and 8 (1571 & 1581)**

Students who enjoy singing are invited to participate in Chorus. Chorus is a regularly scheduled class. The Chorus performs at some or all of the following events during the school year: in-school and evening concerts, assemblies and music festivals. These performances are the culminating activities of classroom learning and, as such, are important events in the curriculum. Students are expected to attend these performances. Students who excel will be invited by the choral director to audition for the Massachusetts Music Educators Association Northeastern Junior District Festival.

### **Orchestra 7 and 8 (1371 & 1381)**

Instrumentalists who have successfully completed the grade 6 Orchestra program are encouraged to continue in the grade 7/8 Orchestra. Students who did not participate in grade 5 or grade 6 Orchestra but are able to demonstrate the appropriate skills for this level may participate. Grade 7/8 Orchestra is not designed for beginning string students. Orchestra is a regularly scheduled class. The Orchestra will include winds and percussionists selected from the Band by the Orchestra and Band directors. Private lessons are encouraged at this grade level. The Orchestra performs at some or all of the following events during the school year: in-school and evening concerts, assemblies and music festivals. These performances are the culminating activities of classroom learning and, as such, are important events in the curriculum. Students

are expected to attend these performances. Students who excel will be invited by the Orchestra director to audition for the Massachusetts Music Education Association Northeastern Junior District Festival. Instruments, accessories (i.e. rosin, music stands for home practice), and lesson book/Smart Music subscription are to be supplied by the parents.

## **PHYSICAL EDUCATION**

### **Physical Education 7 and 8 (970/980)**

Physical Education includes participation in individual and team sports as well as fitness and recreational activities. Activities offered include: touch football, speedball, field hockey, badminton, wrestling, recreational games, basketball, team handball, floor hockey, softball, volleyball, tumbling, obstacle course, track and field, soccer, tennis, Project Adventure, and New Games. The program stresses the development of skills, knowledge, and attitudes necessary for enjoyment and success in a variety of activities.

## **SCIENCE**

### **Life Science 7 (371/375)**

This course involves the study of the life sciences which include physiology, ecology, genetics, botany, and zoology. Field studies, demonstrations, laboratory activities, class discussions, library and computer research, audio-visuals, projects, as well as individual and cooperative group experiences provide opportunities for the students to discover and to apply scientific methods and principles.

### **Earth Science 8 (381/385)**

This course involves the study of the earth sciences which include oceanography, geology, meteorology, and astronomy. Field studies, demonstrations, laboratory activities, class discussions, library and computer research, audio visuals, projects, individual, and cooperative group experiences provide opportunities for the student to discover and to apply scientific methods and principles.

## **SOCIAL STUDIES**

### **World Studies II (471/475)**

Sixth grade students examine how the perspectives of political science, economics, geography, history, and archaeology apply to the study of regions and countries. They study the development of prehistoric societies and then focus on area studies of Western Asia, the Middle East, North Africa, Sub-Saharan Africa, and Central America, the Caribbean Islands, and South America. Grade 7 examines the physical and political geography and ancient societies of South and East Asia, Oceania, and Europe as well as an investigation of major religions throughout the first millennium..

### **Foundations of Democracy (481/485)**

Students study the roots and foundations of democratic government through an exploration of the historical events and theories that lead to the American Revolution and development of the Republic. Through primary documents, such as the United States and Massachusetts Constitutions; students study how and why government institutions developed; how government evolves through legislation and court decisions; and how individuals exercise their rights and civic responsibilities to maintain a healthy democracy in the nation and the Commonwealth.

All Grade 8 students will participate in an **Action Civics Project** designed to engage students in research, investigate root cause, consider potential solutions and create an action plan for their community.

## **TECHNOLOGY ENGINEERING**

The middle school technology engineering program features a project-based curriculum designed to challenge and engage the natural curiosity and imagination of middle school students. Students envision, design, and test their ideas with the same attention to detail found in companies like Lockheed Martin, Intel and Microsoft. Students acquire knowledge and skills in problem solving, teamwork and innovation as well as explore STEM careers. The knowledge that students gain and the skills they build upon create a strong foundation for further STEM (Science, Technology, Engineering and Mathematics) learning in high school and beyond.

### **Design & Modeling Gr. 7 (771)**

Students apply the design process to solve problems and understand the influence of creativity and innovation in their lives. They work in teams to design a playground and furniture, capturing research and ideas in their engineering notebooks. Using Autodesk® design software, students create a virtual image of their designs and produce a portfolio to showcase their innovative solutions.

### **Automation & Robotics Gr. 8 (781)**

Students trace the history, development, and influence of automation and robotics as they learn about mechanical systems, energy transfer, machine automation, and computer control systems. Students use the VEX Robotics® platform to design, build, and program real-world objects such as traffic lights, toll booths, and robotic arms.

## **WORLD LANGUAGE**

To prepare our students to become citizens of the world and to address the challenges of living in a global society, the World Language Department offers classes that develop and refine communication skills, promote intellectual curiosity, and broaden cultural awareness. During each course within a target language sequence, students are expected to master specific linguistic and cultural proficiencies that embody the four modalities of language learning: listening, speaking, reading, and writing. A variety of instructional strategies, visual and print media sources, and technology tools are used to create an authentic learning environment to maximize exposure to the language, the products, and the practices of other cultures.

To learn a new language is a challenging endeavor with far-reaching benefits. Research supports that the study of an additional language leads to acquisition of skills transferable to other academic areas. Skills include expanded vocabulary development, stronger reading comprehension and critical thinking skills, and increased communication skills. Students who begin the study of an additional language early achieve a higher level of proficiency as they have a higher capacity to reproduce unfamiliar sounds, a greater ability to retain information, and extended exposure to advanced thematic and grammatical concepts.

Active participation in class discussions and completion of assignments beyond classroom instruction are essential aspects to being successful and achieving proficiency in another language.

### **Introductory French (1711)**

This introductory course is designed to expose students to the language and cultures of the French-speaking world. Students will develop basic proficiency in the four modalities of language learning: listening, speaking, reading, and writing. In highly structured and contextualized situations, students will learn to ask and answer simple questions as they learn to talk about themselves, their families, and their friends. Students will respond to basic oral and written prompts about their daily lives and responsibilities. There is a strong emphasis on vocabulary acquisition and verb conjugation at this level. Students will be

exposed to authentic material and various media sources in the target language. French will be used as much as possible during classroom instruction.

### **French 8 (1811)**

This course is the continuation of Introductory French. Themes introduced during the previous year will be reviewed and skills will be reinforced and expanded. Students will continue to develop basic proficiency in the four modalities of language learning: listening, speaking, reading, and writing. In highly structured and contextualized situations, students will make and respond to basic inquiries and hold basic conversations about household chores, favorite restaurants, fashion trends, and vacation planning. There continues to be a strong emphasis on vocabulary acquisition and verb conjugation at this level. In the spring, students' proficiency levels will be assessed. French will be used as much as possible during classroom instruction.

### **Introductory Spanish (1721)**

This introductory course is designed to expose students to the language and cultures of the Spanish-speaking world. Students will develop basic proficiency in the four modalities of language learning: listening, speaking, reading, and writing. In highly structured and contextualized situations, students will learn to ask and answer simple questions as they learn to talk about themselves, their families, and their friends. Students will respond to basic oral and written prompts about their daily lives and responsibilities. There is a strong emphasis on vocabulary acquisition and verb conjugation at this level. Students will be exposed to authentic material and various media sources in the target language. Spanish will be used as much as possible during classroom instruction.

### **Spanish 8 (1821)**

This course is the continuation of Introductory Spanish. Themes introduced during the previous year will be reviewed and skills will be reinforced and expanded. Students will continue to develop basic proficiency in the four modalities of language learning: listening, speaking, reading, and writing. In highly structured and contextualized situations, students will make and respond to basic inquiries and hold basic conversations about their homes, favorite restaurants, fashion trends, and vacation planning. There continues to be a strong emphasis on vocabulary acquisition and verb conjugation at this level. In the spring, students' proficiency levels will be assessed. Spanish will be used as much as possible during classroom instruction.

## **TEAM TIME/NON-PERFORMANCE MUSIC EXTENSION**

### **Non-Performance Music Extension Gr. 7/8 (777/778)**

Students not taking a performance music class are placed into NPM Extension classes with mainly team teachers but may also be with world language teachers. Teachers may extend the curriculum with enrichment activities during this time. Students can also access teachers for extra help, make up assignments/assessments, organize themselves, and work on assignments.

### **Team Time Gr. 7/8 (1071/1081)**

All grade 7 & 8 students spend a shortened block with their team teachers every other day. Teams may use this time for fun/team building activities. Students can also access teachers for extra help, make up assignments/assessments, organize themselves, and work on assignments during this block.