

WESTON PUBLIC SCHOOLS  
WESTON, MASSACHUSETTS

PROGRAM OF STUDIES

GRADES 6 - 8

2016 - 2017

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WESTON MIDDLE SCHOOL

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*Every course and activity at Weston Middle School is open to students  
regardless of race, gender, gender identity, color, religion, sexual orientation,  
ethnicity/ national origin, age or disability.*

## **WESTON MIDDLE SCHOOL**

### **Mission**

The Weston Middle School strives for excellence and fosters a community of learners, guiding students toward their optimal intellectual, social, emotional and physical development.

### **Vision**

The Weston Middle School community fosters academic growth, encourages personal development, and strives for each student to respect her/himself and others. We believe in learning as a process and respect both individual learning styles and the diverse cultural and family backgrounds of our students. A variety of teaching methods is utilized to achieve a shared goal of success for all students. Students are encouraged to develop high expectations for themselves and to meet their goals. All members of the community work collaboratively toward shared ideals, while accommodation is made to meet the needs of the individual. We model mutual respect and tolerance. Students are held responsible for positive contributions to a safe environment for learning and playing.

### **Implementation**

Weston Middle School students thrive in the intimacy of our school where they are closely monitored and feel “known.” The house system is the structure that provides the basis for close collaboration among all members of a student’s team, including parents, teachers, administrators, and coaches. A student enters the Weston Middle School as a child and leaves as a young adolescent. During these years the student develops a greater understanding of personal values, while gaining a perspective on cultural and ideological diversity. The student is encouraged to: advocate for self, yet respect the needs of others; avoid harmful behavior, yet take appropriate risks; embrace creative solutions, yet understand limits and consequences; participate in new activities, yet remain responsible for academic expectations. The Weston Middle School years provide an opportunity to grow and develop, explore and fail, think critically, gain skills and test limits all within the structure of our caring learning community.

### **Goals**

At Weston Middle School all students will:

1. Participate in a well-rounded, quality program that develops their multiple, diverse talents.
2. Act responsibly as they grow to become critical thinkers, problem solvers and independent learners.
3. Develop a sense of self-respect, as they are recognized for positive contributions to the learning community.
4. Build upon successful experiences through participation in curricular and extracurricular offerings including rigorous, challenging academics; experimental and performance-based arts; and interest-based activities and athletics.
5. Respect the diversity of our community and the world, fostering a sense of tolerance and empathy for others.
6. Dare to take appropriate risks and succeed or fail in a safe environment guided by caring teachers, parents, and support staff.
7. Engage in active learning opportunities, and apply skills and talents to real-world problems.
8. Think critically about the world and their role in it as they explore opportunities for service to others within and outside our community.
9. Learn as a community and understand what it means to be a responsible citizen.
10. Discover the joy of learning and all of its wonder.

## WESTON MIDDLE SCHOOL

### **Guidance/Adjustment Counselors:**

Megan Hennessy  
Phoenix Malfa  
Kim Roslonek  
Kari Anne Wye

### **Principal's Message to Weston Middle School Students**

Weston Middle School offers a challenging and balanced program. This document is designed to assist you in understanding the full scope and sequence of what we offer our students. Parents and students, in collaboration with school personnel, should use this document as a guide when discussing course choices. The course request process will begin in January, and it is our goal to have student requests entered into our system during the spring, finalizing student schedules by late spring or early summer.

In addition to classroom courses, the Middle School offers a wide variety of co- and extra-curricular activities for students. These options range from competitive sports and performing arts, to student government and many special interest organizations. I encourage all students to participate in our comprehensive program because it will allow them to develop new perspectives, meet other students, and tailor their middle school experience to their interests. We strive to create successful challenges and experiences both within and outside the classroom.

In the scheduling process, it is my desire to offer each student an optimal program based on core requirements and special interests. However, in this process there are limits. Conflicts during the scheduling process may occur and other choices will have to be made. Please be assured that we will do our best to meet requests and have the least conflicts possible.

Finally, I believe the Middle School curriculum is well developed and the courses meet the needs of our students and the Standards, Big Ideas, and Benchmarks of our district. It is my hope that our students will become independent learners and thinkers. I give credit to the exceptional teachers you will encounter in this process, who work diligently designing and enhancing our program. I hope students will develop their talents and become skilled problem-solvers who can use what the school has to offer to make a difference in our world.

Sincerely,

*John Gibbons*

John Gibbons  
Principal

## **MIDDLE SCHOOL HOUSE SYSTEM**

The house system is the heart of the Middle School, providing both an academic and self-esteem promoting structure for the young adolescent. A house is a transitional structure, which melds the departmental emphases of the High School with the traditional "homeroom" pattern of the elementary schools.

The houses have teams of teachers in English, history/social studies, science, and mathematics. The house facilities include an office, a conference room, and classrooms. Grouping is heterogeneous, except in mathematics classes. All students take courses outside the house in health and physical education, the arts, and world languages.

The house office and corridors with adjacent classrooms are "home" for the Middle School student. Each house elects a House Council and holds house meetings for sharing information and planning activities. House officers often initiate and help organize house activities, and athletic events. House faculty meets several times a week to share information about students, develop strategies for instruction, and plan programs. The Middle School house system has proved to be a popular and successful structure for meeting the diverse academic and social needs of students at an important point in their personal development.

Parents are encouraged to maintain close contact with the school regarding their child's progress. Appointments with house faculty may be scheduled for the first Wednesday afternoons of most months as well as at other times, which are mutually convenient.

## **REPORTING PROGRESS**

Report cards are issued four times during the school year. Grades are reported for the first term; second term and first semester; third term; and fourth term, second semester and for the year.

Marks found on report cards may be any of the following:

A = Excellent	F = Failing
B = Above Average	P = Passing
C = Average	W = Withdrawn
D = Poor	

Plus and minus signs may be used to indicate levels of achievement within the range of letter grades A through D. D- is considered the minimum passing grade.

Special reports may be issued in the middle of each marking period to call the attention of students and their parents, to the fact that student work is not up to the standards expected or to commend students for outstanding work. In many instances it is desirable that such notices be supplemented by a conference between the student, his/her parents, and the teacher. On occasion students and their parents may wish to discuss scholastic difficulties with guidance counselors as well. Teachers may also use special reports at any time to record work students have done exceptionally well.

Special reports are also issued as a supplement to report card grades, indicating unsatisfactory or failing work. These reports will give the reasons why work is unsatisfactory or failing and will also suggest ways in which students can improve their level of achievement and also to commend students for outstanding work.

## **COURSE SELECTION**

Middle School course selection is determined by parents and counselors who work with the principal to establish student schedules. All 7th and 8th grade students take the core subjects of English, history/social studies, science, mathematics, world language, and health and physical education.

Except for students newly enrolled in the school, students will not be allowed to enter full year courses after October 15 of each school year unless entrance to a course involves a change in course level within a given discipline or subject. Such a change must be accompanied by written permission of the principal.

Also, middle school students take a series of electives in art, design/construction, technology, drama, dance, and music. These are scheduled in an arts rotation which consists of nine-week units in various areas. The principal establishes the arts rotation schedules. See the section below titled "Arts Rotation" for descriptions of those elective courses.

## **ARTS ROTATION**

In Grade 6, students will take 4 courses in a rotation, Art, Drama, Music and Guidance Seminar. In Grade 7, students will choose from Visual Art, Design Construction, Drama, Robotics and Music.

Students at Grade 8 take four quarters of art electives. In addition, vocal and instrumental music course offerings are available to students, grades 6-8. Class sizes and schedule conflicts may affect availability of some art choices.

Overall, the Middle School arts rotations by grade level will be as follows:

Grade 6: One quarter each of Guidance Seminar, Music, Art, or Drama in a rotation.

Grade 7: One quarter of four of the following: Drama, Music, Robotics, Art, or Design/Construction.

Grade 8: One quarter of four of the following: Scene Study, Acting and Improvisation, Art/Architecture, Drawing, Digital Photography, Dance, Musical Theatre, Design/Construction, Sculpture or Video Journalism.

**PLEASE NOTE: There is always the possibility that courses listed in the Program of Studies may not run due to low enrollment or budget constraints.**

## ELECTIVES IN ARTS ROTATION

### VISUAL AND PERFORMING ARTS

**Course M860 GRADE 6 ART**  
**M870 GRADE 7 ART**

The Middle School art curriculum exposes students to drawing, painting, printing, color theory, sculpting, and mask making. The program aims to make all students art literate. Teachers will coach artists to attend to detail, explore materials and techniques, develop their own style of expression, and produce quality work. These studio courses teach skills and appreciation while exhibitions, contests and publications provide public recognition of student achievement.

**Course M862 GRADE 6 DRAMA**  
**M872 GRADE 7 DRAMA**

Students explore the dramatic process by working together to create a variety of characters and imagery. They play theater games that help them sharpen their acting skills such as body movement, vocal expression, listening and concentration, imagination and spontaneity. They learn how to “stage” their ideas to communicate to an audience, and in turn, they learn to look critically at the performances of others. Students work as a team to create improvisational dramas and prepared scenes, using their own experiences as sources, as well as poems, music, and written dialogue.

**Course M866 GRADE 6 MUSIC**

This course will offer instruction in the mechanics and appreciation of music. The courses will include singing, listening, improvisation, and movement. Students will learn about melody, rhythm, harmony, form, dynamics, and tone color.

**Course M878 GRADE 7 MUSIC**

This course will offer instruction in the mechanics and appreciation of music, utilizing the guitar. Previous experience playing guitar is not required. Students will learn to play basic chords in first position and to read standard and tablature notation. Students will learn a variety of accompaniment styles and standard strumming patterns, as well as a repertoire of songs from popular and folk traditions. Heavy emphasis will be placed on singing while playing.

**Course M881 GRADE 8 VIDEO PRODUCTION**

Students in this course will be introduced to various forms of media (like audio, video, photos, music), and have the responsibility of producing, writing, filming and editing a video production. They will learn skills in the areas of organization, time-management, teamwork, and critiquing their own work.

Using the student video lab, students will create a video that not only exhibits sound technical elements, but also demonstrates a responsible use of this technology and media.

**Course M882 GRADE 8 ACTING & IMPROVISATION**

Acting skills are taught through theater games and improvisation. Students develop a range of characters and work together as an ensemble to dramatize their ideas. Projects may include creating original plays and working with written dramatic material.

**Course M883 GRADE 8 SCENE STUDY**

Students will learn the basics of directing, rehearsing and performing scenes from published plays. For a culminating project, classes choose from a variety of options such as performing a one-act play, presenting a performance of scenes, or working on individual auditions monologues. This is a more advanced acting experience for the student who would like to perform for an audience.

**Course M886 GRADE 8 DIGITAL PHOTOGRAPHY**

This course introduces students to digital image building. Source images acquired from the web, digital cameras, and scans provide material for image enhancement and manipulation using Adobe PhotoShop software. References to image development in history are discussed as useful to contemporary work. High quality printing techniques on various photo and art papers are also covered. The skills learned provide students with an important foundation for future computer graphic work at the High School and beyond.

**Course M887 GRADE 8 MUSICAL THEATER**

Students will learn about the genre of the American Musical Theater by studying its history, creating their own original musical scenes, and performing scenes from some of our most famous creators of musicals, such as Rogers and Hammerstein or Stephen Sondheim. Students will also be involved in all aspects of the production of their scenes from costuming, sets and lighting to singing, acting and dancing.

**Course M888 GRADE 8 DANCE**

Students will learn basic dance steps and build them into short dances at the end of each class. We move in a variety of dance styles to a wide range of recorded music, as well having some classes with a live musician. Students do not need prior dance experience—just a willingness to move and have fun with it! Students will also be exposed to trends in dance history and the current dance scene, and will also learn to choreograph some of their own dances.

**Course M889 GRADE 8 DRAWING**

Through a series of drawing exercises in contour, gesture, tone and color layering, students are provided with a foundation of techniques that allow for the development of a personal style. Projects such as self-portraits are accomplished in pencil, charcoal, Craypas, and mixed media. Realism, which is stressed early in the course, naturally evolves into a more expressive or abstract handling of subject and materials.

**Course M891 GRADE 8 PLAY READING AND PLAYWRITING**

This course provides an introduction to play reading and prepares students for further study in theatre. Students will read and discuss a variety of plays, considering each play from the practical perspective of the actor, director, designer, and technician. The course will also cover the fundamental dramatic elements, styles and genres. This course is ideal for actors and other theatre enthusiasts who would like to become familiar with a wide range of plays.

This course will also offer an introduction to the craft of the Playwright. Students will study the fundamentals of dialogue, character development, and scene structure. Students will hone these skills through simple playwriting exercises and the analysis of other students' work.

**Course M892 GRADE 8 FOUND SOUND**

*Improvisational Instrument Making and Performing*

This pilot course in percussion-based musical performance will open students' eyes and ears

to the sounds and rhythms that surround them. Students will create and play musical instruments using ‘found’ everyday materials (buckets, metal scrap, PVC pipe, springs, wire, wooden boxes, etc.), learning about the physics and acoustics involved in the construction of a musical instrument. Using these handmade instruments, students will explore a variety of musical genres (such as rock, jazz, hip-hop, and popular music) through collaborative and individual performance. Particular attention will be given to the rhythmic and improvisatory aspects of music, as well as to the creative process of composition.

With computer software such as Garage Band, students will learn to digitally record, edit, and mix their melodies and rhythms into complete pieces without needing to read or write musical notation. Students will be able to save songs as mp3s and ultimately create a class album of original compositions and performances. Using the music created in this course, students will work collaboratively with other Grade 8 students in Digital Imaging, Dance, Video, and Mask-Making to create a variety of end-of-quarter performances. This course requires no previous musical training.

**Course M893**

**GRADE 8 INTRODUCTION TO MUSIC THEORY AND COMPOSITION**

This course will provide 8th grade students with all the tools necessary to enter high school as musically competent individuals, regardless of their specific musical interests. The following topics will be covered at an introductory level, with emphasis placed on their relevance to performing ensembles and the students’ prior musical interests: reading and writing musical notation, understanding basic musical concepts (pitch, rhythm, chords, etc.) and basic composition, listening critically, and making connections and applications across musical genres. This course will utilize computer lab technology, allowing students to make use of interactive software and MIDI keyboards, making theory and composition both engaging and enjoyable.

**Course M871**

**GRADE 7 MATH LAB**

This course will target students who will benefit from additional support in mathematics as identified by teacher recommendation, MCAS and ERB results. It will focus on addressing student mathematical needs to support their work in math classes and on the MCAS. The course will be computer based, using online resources to develop skills, problem solving, and open response strategies.

**Course M873**

**GRADE 8 ELA LAB**

This course will target students who will benefit from additional support in English/Language Arts as identified by teacher recommendation, MCAS and ERB results. It will focus on addressing student English/Language Arts needs to support their work in English classes and on the MCAS. The course will be computer based, using online resources to develop vocabulary, reading comprehension, grammar and usage, writing, and open response strategies.

**Course M868**

**GRADE 6 GUIDANCE SEMINAR**

Taught by the grade-six guidance counselor, this course will focus on concepts of social competency, health and wellness, and anti-bullying. Students will cycle through units focusing on effective communication, interpersonal relationships, problem solving, anti-bullying, reducing stress, coping and resiliency, self-advocacy, organization, time management and contributing to a positive school climate. It will serve as a companion to the grade six-health course, grade-six “Harassment Will Travel” program, and the grade-six “RALI for success in school” program

## ENGLISH

The English courses in grades 6 - 8 are designed to enhance each student's reading, writing, and oral skills. They are also specially designed to encourage open and clear communication, and foster reading for comprehension, analysis and enjoyment.

Each course requires homework and student participation in class discussions. In addition, the program is constructed to give students the opportunity to succeed in a wide variety of learning experiences including: writing poetry, short stories, and essays; delivering speeches; and reading literature.

**Course M262 GRADE 6 READING WRITING CONNECTIONS Full Year**  
**M263** This course meets three out of every five school days and is designed to enrich and support  
**M264** students' skill development in their core English classes. Work will focus primarily on developing students' written communication skills through a variety of individualized writing opportunities enhanced and supported by choice reading and the study of vocabulary and grammar.

**Course M260 GRADE 6 ENGLISH Full Year**  
**M261** This course is designed to provide reading and writing instruction and practice. All types of literature are read and studied including fiction, biographical pieces, and informational texts. Some novels read include: *Roll of Thunder, Hear My Cry*; *Seedfolks*; and *Home of the Brave*. The class will employ the process writing approach, and students will put considerable work into their revision efforts. Narrative, argumentative, and expository writing are the main forms studied. Students work toward mastering writing strong paragraphs that include central ideas, textual evidence when appropriate, and the development of ideas. Paired conferences, small group work, student-teacher conferences, and ongoing teacher feedback are part of this process. With the iPad, digital presentations, and internet research, various technologies will build upon students' 21st century skills.

**Course M270 GRADE 7 ENGLISH Full Year**  
**M271** Reading, writing, and discussion form the core of the seventh grade English program.  
**M274** Students are encouraged to read actively, write clearly, and participate thoughtfully. Through rich discussions, detailed presentations, and thoughtful reflections, students will build upon 21<sup>st</sup> Century Skills by utilizing various technologies, including the iPad, to enhance their learning.

Students study literature from varied genres including short stories, novels, plays, poetry and non-fiction. Some works read include *The Giver*, *The Diary of Anne Frank*, and *The Outsiders*. Students learn about and practice various literary techniques, vocabulary, note-taking skills, and essay writing. Through the process writing approach students draft, edit, and revise in order to enhance their work. Students also participate in paired conferences, small group work, and student-teacher conferences as part of this process.

**Course M280 GRADE 8 ENGLISH Full Year**  
**M281** In Grade 8 English, students read, discuss, and write about literature of various genres,  
**M282** including fiction, non-fiction, drama, and poetry. Assignments are designed to deepen and broaden the understanding of key literary terms and improve clarity of written and oral communication. Through literature students will explore important issues that are relevant to their lives, such as justice and coming of age. All eighth grade students will read and study five core texts: *Pathways: Literature for Readers and Writers*, *Of Mice and Men*, *To Kill a Mockingbird*, *A Midsummer Night's Dream*, and *Animal Farm*. These core texts are supplemented with additional reading throughout the course.

By the end of the year, students will improve their overall writing skills, with an emphasis on analytical writing. They will also see writing as a means of thinking through and expressing thoughts and ideas. In addition, students will continue to enrich their grammar and vocabulary skills through reading and exercises, and will employ technology, including the iPad, regularly in and out of class.

## HISTORY/SOCIAL STUDIES

The history/social studies curriculum is designed to help students acquire the knowledge, judgment, and skills to participate intelligently and responsibly in civic life and continue to learn for themselves. Essential skills of writing expository papers, using library resources and technology, reading maps, interpreting authentic documents and data, preparing research papers, and participating in discussions are taught and reinforced in all courses.

- Course M360 GRADE 6 SOCIAL STUDIES Full Year**  
**M361** Sixth grade Social Studies will introduce students to the world through its physical, political, economic, and cultural characteristics. Students will develop geographic literacy and skills while expanding their ability to use technology effectively, think critically, and collaborate in groups. Additional emphasis will be placed on students' ability to write well, read and evaluate non-fiction sources, and conduct research.
- Course M370 GRADE 7 HISTORY OF Full Year**  
**M371 ANCIENT CIVILIZATIONS** This course will investigate the major components of civilizations in the ancient world. Elements of these civilizations to be explored include government, law, religion, social structure, literature, art, geography, and architecture. Students will begin with the early civilization of Sumer. Subsequent units will include the Middle East, India, China, Greece, and the Roman Empire. Throughout the year, emphasis will be placed on refining students' basic skills in research, oral expression, and critical writing.
- Course M380 GRADE 8 UNITED STATES HISTORY Full Year**  
**M381** This course is designed to reinforce students' understanding of History in general, and American History in particular. In addition to a chronological survey of early United States' History, emphasis will be placed on the roots of our nation's ideals, traditions, and institutions. The annual eighth grade trip to Washington, D.C., will provide an opportunity to make the nation's capital a key component of the course, and will allow students to see themselves as active participants in the process of government. Throughout the year, students will continue to work on skills-development, with particular emphasis on writing expository essays. Current events will be integrated into the course to help students connect the past to the present.

## MATHEMATICS

The courses in mathematics emphasize the pattern, structure, and unifying ideas of the discipline. Since we have witnessed tremendous growth in uses of mathematics during the past thirty years, it is virtually impossible to predict all our future mathematical needs. We attempt to provide opportunities for students to achieve the mathematical, statistical, and computer literacy that will be required by tomorrow's society. Acquiring problem-solving skills is a major emphasis of the program.

The mathematics department recommends that students take alternate mathematics courses (summer school, on-line, or after-school mathematics courses) only if they have done poorly in the corresponding academic year course or desire such a course for enrichment. When encountering specific mathematics courses for the first time, students should not substitute such alternate courses for regular academic year courses in their mathematics programs. In general only academic year courses provide the time and group interaction necessary to develop an appropriate understanding of the concepts involved. Students will generally not be permitted to skip courses by taking alternate courses and students who take alternate courses prior to the academic year course should do so with the understanding that they will encounter some repetition of material in their academic year course. For further information about this policy, contact the department chair.

**Course M160 GRADE 6 HONORS MATHEMATICS Full Year**

**M161** Students in this course should have a solid mastery of their number facts, skill in abstracting, and an active interest in mathematics. The course will include expanding skills with fractions and decimals; work with the four operations and the order of operations; exploring graphs and analyzing data; two-dimensional geometry; an introduction to algebraic concepts; work on patterns in numbers and shapes and expressing those patterns algebraically; and studying ratios. Throughout the course students will be exposed to a variety of problems and puzzles designed to develop problem-solving skills and encourage creative thinking.

**Course M162 GRADE 6 MATHEMATICS Full Year**

**M163** Students in this course should be able to demonstrate mastery of most number facts. The course will include expanding skills with fractions and decimals; work with the four operations and the order of operations; exploring graphs and analyzing data; two-dimensional geometry; an introduction to algebraic concepts; work on patterns in numbers and shapes and expressing those patterns algebraically; and studying ratios.. Throughout the course students will be exposed to a variety of problems and puzzles designed to develop problem-solving skills and encourage creative thinking.

**Course M165 GRADE 6 TOPICS IN MATHEMATICS Full Year**

This course is for students concurrently enrolled in Grade 6 Level II Mathematics (Course M162 or M163) who need additional mathematics instruction to succeed in that course. Instruction in Topics is designed to reinforce concepts from Level II Mathematics, address skill weaknesses, develop the habits of mind necessary for success in mathematics, and prepare students for upcoming lessons in Level II Mathematics. Grade 6 Topics meets 2 times a week; the course is a pass/fail course and has no required homework.

**Course M170 GRADE 7 HONORS MATHEMATICS Full Year**

**M171** This course is designed to prepare students for Honors Algebra I in Grade 8. The year will be divided into four major units: Operations in Expressions and Equations, Ratios and Proportions, Three Dimensional Geometry, and Probability. Only students with high motivation and demonstrated mathematical achievement should enroll in this course.

<b>Course</b>	<b>M172</b>	<b>GRADE 7 MATHEMATICS</b>	<b>Full Year</b>
	<b>M173</b>	Grade 7 Mathematics is a college preparatory course that continues students' exploration of algebraic concepts. Students are recommended for this course by their 6 <sup>th</sup> grade teacher. Course content will consist of four major units: Operations in Expressions and Equations, Ratios and Proportions, Three Dimensional Geometry, and Probability. By the end of the year, students in this course will be prepared to take Grade 8 Algebra I.	
<b>Course</b>	<b>M175</b>	<b>GRADE 7 TOPICS IN MATHEMATICS</b>	<b>Full Year</b>
		This course is for students concurrently enrolled in Grade 7 Mathematics (Course M172 or M173) who need additional mathematics instruction to succeed in that course. Instruction in Topics is designed to reinforce concepts from Grade 7 Mathematics, address skill weaknesses, develop the habits of mind necessary for success in mathematics, and prepare students for upcoming lessons in Grade 7 Mathematics. Grade 7 Topics meets 2 times a week; the course is a pass/fail course and has no required homework.	
<b>Course</b>	<b>M180</b>	<b>GRADE 8 HONORS ALGEBRA I</b>	<b>Full Year</b>
	<b>M181</b>	This course is a challenging introduction to algebra. Major topics will include linear equations, graphs and functions, systems of linear equations, polynomials, factoring, and quadratic functions. Algebra I features hands-on investigations of interesting and meaningful problems. Students will use a practical blend of technology-related and paper-and-pencil problem-solving tools including graphing calculators. Only students with high motivation, exceptional ability and demonstrated mathematical achievement should enroll in this course.	
<b>Course</b>	<b>M182</b>	<b>GRADE 8 ALGEBRA I</b>	<b>Full Year</b>
	<b>M183</b>	This course is a college-preparatory introduction to Algebra. Major topics will include linear equations, graphs and functions, systems of linear equations, polynomials, factoring, and quadratic functions. Algebra I features hands-on investigations of interesting and meaningful problems. Students will use a practical blend of technology-related and paper-and-pencil problem-solving tools including graphing calculators.	
<b>Course</b>	<b>M185</b>	<b>GRADE 8 TOPICS IN ALGEBRA</b>	<b>Full Year</b>
		This course is for students concurrently enrolled in Grade 8 Algebra I (Course M182 or M183) who need additional mathematics instruction to succeed in that course. Instruction in Topics is designed to reinforce concepts from Algebra I, address skill weaknesses, develop the habits of mind necessary for success in mathematics, and prepare students for upcoming lessons in Algebra I. Grade 8 Topics in Algebra meets 2 times a week; the course is a pass/fail course and has no required homework.	
<b>Course</b>	<b>M186</b>	<b>APPLIED DISCRETE MATHEMATICS CONCEPTS (Not Offered 2016-2017)</b>	<b>Full Year</b>
		This course offers students the opportunity to study the application of important mathematical concepts to real world issues and problems. Students will gain a solid understanding of fundamental mathematical ideas by developing mathematical models and applying technology while using these models for decision making. The topics studied might include mathematical models for the study of traffic and the spread of gossip or disease; the use of probability and inferential statistics to make predictions from limited data; applied game theory; applied graph theory; operations research/queue theory; mathematical systems for modeling situations ranging from urban geography to political decision making; risk analysis and numeracy.	

**Course M189    GRADE 8 APPLIED ADVANCED ALGEBRA    Full Year**  
**(Not offered 2017-2018)**

This course is for eighth grade students who have successfully completed a full year of algebra, usually by taking course M179. The course continues work in challenging algebraic topics such as factoring, rational algebraic expressions, multi-variable systems of equations and inequalities, and radicals. In addition, students will use algebra to explore other mathematical areas such as conditional probability, solid geometry, continued fractions, numeration systems, game theory and three-dimensional graphing. Both this course and Course M180/181 (Grade Eight Honors Algebra One) lead to Honors Geometry in grade nine.

## MUSIC

The Music Department provides opportunities for participation in vocal and instrumental groups, and offers general music courses at grades 6 and 7. The purpose of the music offerings is the cultivation of a lasting appreciation of music and the personal enrichment brought about through participation and study. Music students also have the opportunity to audition for the Junior Northeast Festival.

Course	<b>M901</b>	<b>GRADE 6 MIXED CHORUS</b>	<b>Full Year</b>
	<b>M902</b>	<b>GRADE 7 MIXED CHORUS</b>	<b>Full Year</b>
	<b>M903</b>	<b>GRADE 8 MIXED CHORUS</b>	<b>Full Year</b>

Students will be taught harmony, diction, and other vocal techniques needed for good choral singing. Music selections will include a range of styles representing different cultures and eras. The choruses will perform in the winter and spring concerts, and rehearsals and performances outside of regular school hours will be required.

Course	<b>M900</b>	<b>GRADE 7/8 MADRIGALS</b>	<b>Full Year</b>
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This is a performing group established to enrich the serious chorus student. Admission to this group is by audition only. Students selected for Madrigals are also required to sing with the 7th or 8th grade chorus. Rehearsals and performances outside of regular school hours will be required.

Course	<b>M908</b>	<b>GRADE 6 BAND</b>	<b>Full Year</b>
	<b>M904</b>	<b>GRADE 7 BAND</b>	<b>Full Year</b>
	<b>M905</b>	<b>GRADE 8 BAND</b>	<b>Full Year</b>
	<b>M909</b>	<b>GRADE 6 STRING ORCHESTRA</b>	<b>Full Year</b>
	<b>M907</b>	<b>GRADE 7/8 STRING ORCHESTRA</b>	<b>Full Year</b>

The instrumental groups will offer instruction in the development and refinement of intermediate performing and ensemble techniques. Students will continue to broaden their knowledge of music fundamentals: scales, keys, rhythm patterns, dynamics, and expression of symbols. Rehearsals and performances outside of regular school hours will be required.

Course	<b>M906</b>	<b>JAZZ BAND</b>	<b>Full Year</b>
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This course is a performing group established to enrich the serious band student. Admission to this group is by audition only and based on the instrumentation needs of the group. Students will learn the language of jazz through the study of jazz fundamentals: blues scales, swing rhythms, articulations, dynamics, and improvisation. Rehearsals and performances outside of regular school hours will be required. Students in the Jazz Band also will be required to play in the 7<sup>th</sup> or 8<sup>th</sup> grade band (7<sup>th</sup>/8<sup>th</sup> grade orchestra for string bassists).

**The scheduling of all music electives is contingent upon class sizes, enrollments, and lack of conflicts. Students may have to choose between music electives under certain circumstances.**

## SCIENCE AND TECHNOLOGY/ENGINEERING

The Weston science and technology program is designed to guide students toward science literacy in our increasingly complex technological world. Our goal is to help students learn to think scientifically in analyzing and evaluating important science-based questions, while at the same time encouraging curiosity and wonder about the details they observe in the world around them. Likewise, through project-based experiences in design, computer-science, and the technological arts, students learn to both understand and to become active creators of the human-made world that surrounds them.

The middle school science and technology/engineering curriculum has been revised in accordance with the Next Generation Science Standards (NGSS), and updates to the Massachusetts Science Frameworks. In place of traditional disciplines, science and technology/engineering is taught in a spiraled manner, emphasizing cross-cutting concepts including patterns, systems and system modeling, energy and matter flows, cause and effect, scale, proportion and quantity, structure and function, and evolution.

Grade-appropriate reading, writing, and mathematics concepts are embedded throughout the curriculum, as recommended by the Common Core Standards.

Additionally, in each year, students explore the connections between science and technology/engineering through a series of engineering design projects, both within their science courses and through their choice of technology/engineering electives that take place during the arts blocks.

### Course M460    **GRADE 6 SCIENCE**    **Full Year**

Sixth Grade science is centered around student based inquiry learning and problem solving. In this introductory year to middle school, it is important to introduce students to hands-on learning and experimentation in the science curriculum. Instructors work to instill scientific thinking processes and basic engineering/design principles in the students as they build things and explore the world around them.

Following the engineering design process, students will build instruments, boats, and windmills as they study the nature and properties of matter and energy transformation. Measurement of scale, proportion, and quality are applied to both engineering design and chemical reactions of matter. Weather and the environment are studied as systems, both driven by energy flow originating from the sun.

Reading and writing are also important skills emphasized in science (all classes are English class!). Students learn the importance of communicating ideas in science by writing several lab reports throughout the year, culminating in a Design-Your-Own-Lab project in the 4<sup>th</sup> quarter. Among the topics studied are properties of matter, basic particles of matter, energy transformation, Heat, Weather, and Ecology.

### Course M470    **GRADE 7 LIFE SCIENCE**    **Full Year**

**Seventh grade begins with a look at the “Earth as a system” and how the geosphere, hydrosphere, atmosphere, and biosphere interact to give us our planet as we know it. Then,** building upon the study of the environment at the end of Grade 6 Science, students in Grade 7 focus primarily on the study of the biological world around them, its change over time, and its interconnection with earth's long history.

Central areas of study and investigation include classification and the six kingdoms of living organisms (based on both physical structures and genetic patterns); the study of cells and their function as a system of interacting organelles, genetics and heredity; and biological

evolution. This is connected to its basis in changes in the Earth over deep time, created by the energy flows and convection currents, which drive plate tectonics. Mathematical concepts such as scale, proportion, modeling, and exponents are woven throughout, applied to such areas as deep time, radioactive dating, and levels of biological organization from atoms to ecosystems. The engineering design process is incorporated with an in depth look at density through the creation of an object that neither floats nor sinks.

Significant skill-based learning goals for this course include teamwork in lab, effective note taking, personal organization, study and test taking skills, and meaningful participation in class and lab. Content and skills are developed through a variety of approaches including technology based activities, inquiry labs, and regular assessments.

**Course M480      GRADE 8 EARTH SCIENCE      Full Year**

In Grade 8 science the study of systems is a recurring theme. Students study the Earth as a system driven by energy flows, including plate tectonics, interactions of matter, atmospheric science, and climate change, as well as the Earth's place in space as a component of the larger solar system. Systems on a more personal scale are studied as well, through the exploration of the interacting organ systems of the human body. Forces on objects, and their resulting motions are investigated, both qualitatively and as through application of Grade 8 algebra, illustrating the cross-cutting concept of cause and effect. Students culminate the year by using the engineering design process to model, develop and implement a design for a bottle rocket, analyzed as a system, which includes guidance, propellant, and engine subsystems.

Major emphasis will be placed on the application of organizational skills, continued acquisition of study skills, discovery by inquiry and critical thinking, data collection and presentation of experimental information.

**Course M483      SCIENCE PRE-VIEW      Full Year**

Science Pre-View is a course designed for students who need additional support in developing science processing skills and conceptual understanding. A major component of this course is to preview science terms and concepts that will prepare students for future classes, and long term understanding. Also, a review of key concepts covered in previous years will be presented in order to ensure a better understanding of the science curriculum. This course will offer labs skills review, discussions, varied activities and assessments.

**Course M874      GRADE 7 ROBOTICS**

This course introduces students to basic concepts in engineering and computer science, utilizing the Lego NxT Mindstorms system and the NxT-G programming environment to design, model, and prototype robotic systems. Students begin by learning sturdy construction methods with Lego Technics beams through the design of a sturdy chair. The use of gears and other mechanisms to transform speed, torque, and motion are explored. The programming of microcomputers is then explored, applying sensors, motors, and sounds to solve a series of robotic design challenges. Students learn to model behaviors as algorithms, then implement the algorithms in code, learning concepts such as loops, decision trees, and signal thresholds in the process. Finally, these techniques are applied to one or more open-ended design challenges, such as a robotic creature, amusement park, transportation system or exploration voyage, which emphasize engineering systems. Throughout, students are introduced to the work of current leaders of robotics research, and the application of robotics to real-world applications such as navigation, medical prosthetics, and social interaction.

**Course M876      GRADE 7 DESIGN/CONSTRUCTION**

This course introduces students to the key concepts in engineering design- modeling and systems- through projects emphasizing structural concepts. Students begin by building and testing to failure models of an antenna tower, beams, and columns, and learning the forces that act on structures, including tension, compression, bending, and shear. Students learn about how these principles apply to the various types of bridge designs including beam bridges, truss bridges, and suspension bridges, and how their design has changed through history. They apply these concepts to the building and testing of prototype truss bridges, using both physical modeling and an engineering simulation program to explore concepts such as efficiency and redundancy. In the final unit, students learn about affordable architectural design. Students create computer models of a house using a computer-aided design program, and then build a physical model of their structure, using saws, drills, and various other shop tools.

**Course M880      GRADE 8 CONTEMPORARY ART**

Art is alive, and artists are speaking to the issues of our time right now! In this course, WMS artists will explore themes, techniques and materials that are currently trending in today's art community. In doing so they will learn how to make real-world connections, experience and appreciate the world of visual art. Course projects will be inspired by current Metro-Boston exhibits, and driven by individual student interest. The experience will culminate in a museum field trip each spring.

**Course M884      GRADE 8 DESIGN/CONSTRUCTION**

*An Introduction to Craftsmanship*

This elective course gives students experience in design, technological problem- solving, and craftsmanship in woodworking techniques, using both hand and power tools. Students begin by reviewing shop safety, tool use, and technical drawing, in the context of a simple wood project such as a sanding block. Next, they learn the use of miter saws, routers, bandsaws, sanders, drill presses, and finishing techniques though the design and construction of a fine art miter-joint box or bandsaw box of their own design. In a final project, they design and construct a small table or chair, building a scratch model, then using mortise-and-tenons and other joinery concepts to construct a final product.

## WELLNESS

The Wellness Program, Grades 6-8, contains health and physical education courses that are designed to provide students with the knowledge and skills necessary to make good health decisions. The program has adopted the Massachusetts Comprehensive Health Curriculum Framework's core concepts: health, literacy, health self-management, and health promotion. The goals and objectives of this program are met through the courses in health and physical education.

- Course M760**      **GRADE 6 PHYSICAL EDUCATION**      **Full Year**  
Grade 6 Physical Education will continue the themes addressed in grade 5. There will be an emphasis on fitness, and basic psychomotor skill acquisition in the context of team sports and developing healthy social relationships. Units offered include: basketball, field hockey, soccer, volleyball, track, swimming, volleyball, and badminton. The course will meet for two class periods each week.
- Course M761**      **GRADE 6 HEALTH EDUCATION**      **Full Year**  
This course for sixth graders will focus on health education topics. The course will provide students with opportunities to learn more about their physical, social, emotional, and intellectual development, and help them develop health-related refusal and decision-making skills. This course will meet for one period each week.
- Course M770**      **GRADE 7 PHYSICAL EDUCATION**      **Full Year**  
Grade 7 Physical Education will provide the opportunity for students to further develop increased psychomotor skills and advance to game application of those skills. Fitness concepts are emphasized, with students encouraged to explore their own responsibility and skills needed for personal fitness. Units offered include: football, ultimate, basketball, field hockey, soccer, volleyball, track, swimming, strength training, cardiovascular health, volleyball, and badminton. The course will meet for two class periods each week.
- Course M780**      **GRADE 8 PHYSICAL EDUCATION**      **Full Year**  
Grade 8 Physical Education will continue the process of improving advanced psychomotor skills while also transitioning students from sport activities to individual fitness activities. The development of personal fitness goals, and increased responsibility and accountability for one's health, personal behavior, and self-efficacy are emphasized. Units offered will include: fitness concepts, strength training, volleyball, track, swimming, and racquet sports (pickleball, tennis, and badminton), rugby, and team handball.
- Course M771**      **GRADE 7 HEALTH EDUCATION**      **Full Year**  
Grade 7 Health Education focuses on personal responsibility and healthy decision-making. Students will cover a number of important topics for early adolescent emotional development, including communication skills, violence awareness and prevention, stress and anxiety management, human sexuality, disease transmission and prevention, and mental health.
- Course M781**      **GRADE 8 HEALTH EDUCATION**      **2 Units**  
This course builds upon the grade 7 Health Education curriculum to assist students with improving the skills necessary to resist initiation of alcohol, tobacco, and drug use behaviors. Other health curriculum topics covered during this course includes AIDS/HIV education and participation in the human sexuality seminar program.

## WORLD LANGUAGES

World language courses in Weston follow the proficiency model of world language instruction reflected in the Massachusetts State Curriculum Frameworks and the National Standards for Education. Students are presented with both grammar and vocabulary in context and are encouraged to express themselves in the target language independent of a text as soon as possible. Awareness of cultural differences and similarities is also essential to a complete language education. Interdisciplinary themes allow students to use the language they acquire to learn about their world in general. They also demonstrate a more authentic use for the language as a means of communicating important information.

While Latin does not require the same instructional shift from a more traditional methodology to the proficiency model as do Spanish, Mandarin Chinese, and French, curricular objectives for Latin have been modified to make study of the language more relevant to students. Projects, games and historical lessons complement working with grammar and vocabulary, which is presented in context and in an age-appropriate manner. In addition, students learn to recognize parts of speech and vocabulary derivatives which enhance their understanding of their native language. Study skills are an essential part of the curriculum as well.

### FRENCH/SPANISH

**Course M561      GRADE 6 SPANISH      Full Year**

Sixth grade Spanish serves as a continuation of the elementary school Spanish program. Students will be taught to express themselves in the target language and comprehend simple statements, commands and descriptive passages. Grammar will be addressed only in context and grammatical accuracy will be secondary to general communication. Hands-on activities, games and songs will be used to reinforce the material. The ultimate goal of studying a second language at this grade level will be enjoyment of, awareness of the need for, and commitment to language study. This course will meet two periods each week.

**Course M573      SPANISH NOVICE I      Full Year**

Students in this Grade 7 course will continue their study of Spanish that began in the elementary schools. The course will meet four periods per week and the curriculum will build on students' previous learnings. Regular classroom instruction will be supplemented with work conducted in our digital language lab.

Students will be encouraged to use both grammar and vocabulary for self-expression and as communication tools for discussing work in other areas of study. Homework will be assigned on a daily basis, and more traditional and project-based assessments will replace the less formal methods used in Spanish classes at the elementary school level. An important focus of language education at this level will continue to be the acquisition of oral/aural skills. In addition, reading and writing will become a more integral part of instruction. Students will be introduced to linguistic structure as an abstract construct that enhances the precision of speech. Work in grammar and vocabulary will be supported by a traditional language text as well as by teacher-designed materials. Classes will be conducted as much as possible in Spanish, and the use of English will be reserved for more complex explanations of grammar or for ensuring student comprehension of less easily understood classroom procedures.

**Course M581      SPANISH NOVICE II      Full Year**

Prerequisite: Spanish Novice I  
This Grade 8 course is designed for students who have successfully completed Spanish Novice I (Course M573). As is the case in Spanish Novice I, the class will be conducted primarily in the target language with English reserved for grammar explanations and for

some classroom procedures. Weekly use of the digital language laboratory will supplement class work. The year will begin with a brief review of the material covered in Spanish I. However, at this level, our study will focus beyond everyday situations to include storytelling and histories, both personal and cultural, using the two past tense conjugations of verbs. Additionally, students' language production will be expanded to include command forms, all object pronouns and more idiomatic expressions.

Independent use of the language continues to be an overarching goal of the program, and students will be encouraged to speak and write creatively in Spanish. Reading and listening selections will provide cultural material from the Spanish speaking world as well as reinforcement of the grammar and vocabulary in each lesson. A traditional language text will serve as a guide for the work; however, much of the sequence and pacing is determined by the teacher in response to the needs of the class. Hands-on projects and interdisciplinary work will help students make connections between the language they are learning and other aspects of their lives. Whenever possible, native speakers will be invited to classes for both formal and informal presentations, and students will be encouraged to use their language skills in real life situations.

Students completing this level of language instruction will be prepared for the Intermediate level at the High School.

**Course M570 FRENCH NOVICE I Full Year**

This Grade 7 course introduces students to basic concepts of language study, familiarizes them with the various French speaking cultures, and begins the process of building a foundation in vocabulary and grammar which will allow them to communicate in the target language. Traditional teacher-centered instruction will be supplemented with student projects, use of the language laboratory for both drill and listening comprehension exercises, and reading selections. Units of study will include telling time; describing themselves and their friends and families; ordering in a restaurant; and asking for and giving information with regard to weather, daily schedules and activities.

Students will be expected to master the simple present tense; however, as the need arises other tenses may be introduced for comprehension only. Even at this early stage of language acquisition, students will be encouraged to use the language independently to express themselves.

**Course M580 FRENCH NOVICE II Full Year**

Prerequisite: French Novice I and teacher recommendation

Students in this Grade 8 course will expand their work with the language and culture by learning to express and comprehend simple command forms, personal preferences, object pronouns and many common idiomatic expressions. They also will begin their study of the simple past tense as it is used to tell stories, give personal histories, and describe occurrences in the past. Often major historical events from the target culture will be introduced at this point. Although vocabulary and grammar begun in Novice I will be reviewed, there will be an increase in both the pacing and amount of the material to be mastered.

Reading and listening selections, while carefully constructed to reinforce the material presented, will continue to provide challenges for student comprehension. Written and oral assignments will be designed to allow creative, contextualized use of the language.

French Novice II will be conducted entirely in the target language with English reserved only for complex explanations of grammatical structures.

## LATIN

- Course M511**     **LATIN NOVICE I**     **Full Year**  
Students in this introductory Latin course will focus on the connections between Latin, English and the Romance languages; acquire basic vocabulary and grammar needed to read and comprehend the Latin language; and begin their study of ancient Roman history. In addition, students will explore such cultural topics as the study of Roman houses, families, geography, professions, theater and slavery. Traditional classroom instruction will be enhanced by hands-on projects that encourage the integration of language skills.
- Course M512**     **LATIN NOVICE II**     **Full Year**  
Prerequisite: Latin Novice I and teacher recommendation  
Latin Novice II will review all grammar and vocabulary taught in Latin Novice I and introduce more complex grammatical concepts needed to read, write, and comprehend modified Latin stories and passages. The course will continue to focus on Roman cultural topics, including religion and the stories of the *Iliad*, *Odyssey* and *Aeneid*. Emphasis will be placed on gaining mastery of the concepts of case and the ability to translate and comprehend with ease. Traditional classroom instruction will be supplemented by projects.

## MANDARIN CHINESE

- Course M510**     **GRADE 7 MANDARIN CHINESE I**     **Full Year**  
Prerequisite: None  
This course is designed to reflect the proficiency-based orientation of all our oral foreign languages. Classes are instructed primarily in the target language, with English reserved for complex directions or for grammatical explanations not immediately obvious to young students. Producing and responding to simple instructions, expressing wants, exchanging greetings and limited personal information, counting, and naming common objects comprise the bulk of the linguistic goals of this year's study. Cultural information about China, a familiarity with the written language, and an understanding of both similarities and differences between Chinese language and culture and that of the United States are also critical components of our curricular design. As Mandarin is a particularly difficult language for speakers of English to master, students enrolling in this class must commit to a full two years of study before deciding to continue with Chinese or to change languages at the High School.
- Course M513**     **GRADE 8 MANDARIN CHINESE II**     **Full Year**  
Prerequisite: Mandarin Chinese I  
Building on the skills introduced in Mandarin Chinese I, students will add to their knowledge of the spoken and written language. Many of the topic areas covered in Mandarin I are revisited and expanded in the second year of the course. Again, the class is conducted primarily in Chinese, with English reserved for complex conceptual understanding. Entering students are expected to have mastered pin-yin, as well as sufficient characters to express the simple statements or questions presented in the previous year's study. Songs, simple traditional poetry, and folk stories adapted for beginning language learners serve as both a vehicle for developing additional linguistic skills and as an introduction to important components of Chinese culture and history. While the class continues to be teacher directed, independent projects, group projects and work in our digital language lab encourage students to use the language they are studying for creative self-expression.