

Dedham Middle School

Course of Studies Booklet 2011-2012



Table of Contents

Mission Statement and Philosophy	3
English Language Arts	4 – 8
Mathematics	9 – 11
Social Studies	12
Science	13 – 14
Foreign Language	15
Seminar	16
Computer Technology	17
Industrial Technology	18
Fine Arts	19 – 21
Physical Education and Health	22

**Dedham Middle School
Course of Studies
2011-2012**

Dedham Public Schools Mission Statement

The Mission Statement of the Dedham Public Schools, in partnership with the community, is to promote excellence in learning, self-discipline, and motivation.

Dedham Middle School Mission Statement

The mission of Dedham Middle School is to apply knowledge to the best of our abilities, to respect all cultures, and to exceed the expectations of our school.

Dedham Middle School is committed to the intellectual, social and physical development of all students. We will provide a nurturing and safe environment in which a challenging curriculum empowers all students to achieve. We will provide curricular and thematic units rich in activities and opportunities for students to use their multiple intelligences. We will develop many forms of assessment to monitor the progress of all students. We will continue to align our curricula with Massachusetts Frameworks.

We believe in activities that promote physical and mental health, healthful competition, and artistic expression. All students will use their experiences in the middle school as a foundation for academic success in the future and enjoyment of learning throughout life.

Intellectually, all students will

- demonstrate mastery of basic skills.
- accept and pursue academic challenges with confidence and curiosity.
- understand the connections among all the disciplines.

Socially, all students will

- navigate the challenges of the developmental stages of adolescence.
- experience and appreciate the benefits of individuality and diversity.
- demonstrate responsible citizenship.

Physically, all students will

- practice appropriate health habits.
- increase awareness of healthful options for living positive and productive lives.
- pursue activities that enrich leisure time.

English Language Arts

Students in grades 6 & 7 are enrolled in English and Reading classes, while grade 8 students are enrolled only in English. Individual students may be enrolled in small group reading classes in grade 8 based on academic need. Students are placed in to one of two levels. The accelerated level indicates a faster pacing of the curriculum, not a completely different curriculum. These classes are typically referred to as “level 1” classes.

GRADE 6 ENGLISH

The English department is committed to a reading and writing program that will help students become critical thinkers and independent learners. Both reading and writing are thinking and discovering processes that result in the creation of meaning.

The major goal for the reading strand of the 6th grade English curriculum is to enable students to be active, strategic, lifelong readers who understand that reading is a questioning, problem-solving, predictive process, and who comprehend what they read with insight and independence, and who view reading as an opportunity to understand themselves and the world around them.

The major goal of the writing strand of the grade 6 English curriculum is to enable students to communicate their ideas with clarity, confidence and voice in a variety of written forms for a variety of purposes and audiences.

These goals are achieved through many avenues of study. Students will read two full-length novels during the course of the year: *Maniac Magee* by Jerry Spinelli and *The Wednesday Wars* by Gary D. Schmidt. Other smaller selections of fiction are used throughout the course of the year, including short stories and vignettes. Selected works include *Name* by Sandra Cisneros, *The Amigo Brothers* by Piri Thomas and *The Stone* by Lloyd Alexander. Students continuously work on their writing goals by interacting with readings through open-response questions, journals and various other writing activities.

Students also work closely with poetry during the school year. The works of Robert Frost, Langston Hughes, Emily Dickinson and a wide range of other poets are used to introduce the students to poetry and the poetic devices. Students also analyze poetry through interactive writing activities, and they write their own poems in many styles and forms.

Lastly, students compose a number of stand-alone writing pieces. These include narrative writing, persuasive essays and the use of journals. Students begin to hone their MCAS long-composition skills by writing two mock MCAS pieces assigned during the year.

GRADE 6 READING

The goal of the Reading class in grade 6 is to provide all students with the necessary study skills and reading strategies to be academically successful at the secondary level and to become independent lifelong learners.

The curriculum increases students' self-awareness of skills, interests, talents, strengths, and weaknesses as they begin the process of investigating career paths. Using individual texts, students learn how to use content area books for information and understanding (parts of a textbook, reviewing text features, and setting purpose for reading). Strategies especially appropriate for social studies and science texts are emphasized.

Using nonfiction, students learn to gather, select, and organize information from a variety of sources including technology, periodicals, newspapers, short stories and plays. Note taking methods and graphic organizers enable students to analyze, interpret, and evaluate information and to make reasoned inferences to assist them in reading comprehension, writing, and test-taking skills. Students also expand and explore proficient/active reading strategies using various texts as they engage in pre-reading (previewing, activating background knowledge, making predictions, asking questions, and setting purposes for reading), during reading (visualizing, making connections, highlighting key words, note taking, graphic organizers, and distinguishing main idea from details), and post-reading strategies (summarizing and synthesizing). Spelling, vocabulary and word attack skills are incorporated into daily lessons and written assignments. Students are encouraged to read from a variety of genres in their independent assignments and projects. This enables them to deepen their understanding of other times, people and cultures as they broaden their background knowledge.

Other study skills students develop in the course include creating study tools such as flashcards, flipcharts, and windowpaning. Students also develop mnemonic devices. They also learn how to use library resources and create a bibliography. Popular activities in the reading class involve Reading Workshop, book talks, and Reading-Response Journals. Vocabulary development is reinforced through the study of prefixes, roots, suffixes, as well as context. The writing that occurs in Reading is primarily devoted to developing writing skills that mirror the skills needed to succeed on the MCAS test.

GRADE 7 ENGLISH

The English Department is committed to a reading and writing program that will help students become critical thinkers and independent learners. Both reading and writing are thinking and discovering processes that result in the creation of meaning. The major goal for the reading strand of the English curriculum is to enable students to be active, strategic, lifelong readers who understand that reading is a questioning, problem-solving, predictive process, and who comprehend what they read with insight and independence, and who view reading as an opportunity to understand themselves and the world around them.

Students will achieve these goals and objectives by reading and studying the elements of the short story including, but not limited to: "A Mother in Manville," "Flowers for Algernon," "Rikki-Tikki-Tavi," "Miss Awful," "After Twenty Years," "Song of the Trees," "Rolls for the Czar," "Three Skeleton Key," "Christmas," "A Christmas Wish," "Gift of The Magi," "A Day's Wait," "Jeremy Goldblatt is So Not Moses," and "Thank you Ma'am." They will also read and analyze novels such as *Homecoming*, *The Outsiders*, *The Cay*, *Habibi*, as well as selections from the Harry Potter series. Drama forms an important part of the curriculum, and students are exposed to *A Midsummer's Nights Dream*, *Brian's Song*, *Inherit the Wind*, and *A Christmas Carol*. In addition, students study folktales (Beauty and the Beast, Aschenputtel, The Algonquin Cinderella, Yeh-Shen, Anansi's Riding Horse, Aesop's Fables, Oni and the Great Bird, How the Animals came to Earth, Master Frog), poetry (Narrative Poetry, Sam MacGee, The Highwayman, selections of Emily Dickinson and Robert Frost poems, Hector the Collector, Giant Thunder, The Glove and The Lions, The Big Rock Candy Mountains, Fog, A Choice of Weapons, I Hear America Singing) and the essay (Homesick, Barrio Boy, Names/Nombres, Fish Cheeks, When the Earth Shakes, Where Are You Now, William Shakespeare?).

The major goal for the writing strand of the curriculum is to enable students to communicate their ideas with clarity, confidence and voice in a variety of written forms for a variety of purposes and audiences. Students write using a number of patterns of organization including, but not restricted to, expository writing, descriptive writing, compare-contrast, summarizing and paraphrasing. They also learn to construct sentences that abide by the rules governing parts of speech, sentence patterns, usage, and mechanics. Vocabulary development plays an essential role in the learning process that students devote considerable time studying words in context, how they are structured, and how to get information from a dictionary.

GRADE 7 READING

The goal of reading classes is to provide all students with the necessary comprehension skills and reading strategies to be academically successful at the secondary level and to become independent lifelong learners. Reading strategies include, but are not limited to, making connections, questioning, determining importance, inferring and predicting, and using sensory images. Using a variety of sources (current periodicals, newspapers, short stories, plays, and historical fiction), students will develop strategies to enhance comprehension of nonfiction texts that supplement content area learning. Strategies especially appropriate for nonfiction texts are emphasized (previewing, note taking, and vocabulary strategies). Instruction in pre-reading, during reading, and post-reading activities forms an integral part of the course. In particular, students will be able to preview, predict, question, connect, visualize, use context clues, infer, summarize, determine main ideas, identify literary elements, and recall facts and details. Note taking methods and graphic organizers enable students to analyze, interpret, and evaluate information and to make reasoned inferences to assist them in reading comprehension, writing, and test-taking skills. Specifically, students will be able to recognize patterns of organization, use graphic organizers, and write proficient open-responses through the use of Writing with Colors. Students are encouraged to read from a variety of genres in their independent assignments and projects. Word study, based on Greek and Latin roots, will allow students to connect roots to word meaning and improve overall vocabulary knowledge.

In terms of writing, students will communicate ideas with a clear focus, logical organization, and specific and concrete details. By understanding the Six-Traits Analytic Scoring Rubric, students will respond to literature prompts and use revision strategies when writing multi-paragraph pieces and incorporate proper English conventions. Students refine these skills by participating in small group and whole class activities. They will engage in Shared Inquiry, Literature Circles and Pair-Share. Reading teachers use the preceding strategies to motivate interest, accommodate and challenge all students. In addition, teachers also teach students how to engage in partner reading, reading aloud, think-aloud, reading response journals engaged learning strategies (e.g. gallery walks, concentric circles, jigsaws, etc), think-write-pair-share, Guided Reading Lessons, writing mini-lessons, vocabulary activities (word sorts, games, writing exercises) and open response questions.

GRADE 8 ENGLISH

The purpose of this course is to provide students with an opportunity to expand their knowledge and improve their skills in the areas of literary analysis, writing, grammar, public speaking, group discussion, and vocabulary. The eighth grade English program continues to develop the view that reading and writing are interdependent, complementary processes and focuses on the strategies involved in comprehending and composing.

The eighth grade English program offers students a curriculum that will challenge the intellects of students and develop their individual skills. Literacy activities allow students to share with, cooperate with, and respond to their peers, making the learning of reading and writing processes easier and more meaningful. The grade eight English program introduces students to various genres of literature, including short stories such as "To Build a Fire," "There Will Come Soft Rains," "The Ruum," "The Tell-Tale Heart," "Ninki," "By the Waters of Babylon," "Three Wise Guys," and other notable stories and authors. Students will also study novels such as *Roll of Thunder, Hear My Cry*, drama in the form of *Romeo and Juliet*, nonfiction as developed in *The Diary of Anne Frank* and "Lincoln is Shot." In addition, students will analyze poems like "The Raven," "Paul Revere's Ride," "Oranges," and "Casey at the Bat" for structure and meaning. The study of nonfiction will also include speeches ("I Have a Dream" and "The Gettysburg Address"). The writing component consists of multi-draft analytical essays, creative writing, and journal responses. In addition, there are student-centered projects, vocabulary study, and MCAS preparation.

Incorporating Writing with Colors and Six-Traits (Ideas, Organization, Word Choice, Voice, Sentence Fluency, and Conventions) with the Writing Process, students write paragraph-length pieces, mirroring the open-response found on the MCAS test as well as complete essays (introduction, body, and conclusion). Much of the writing will also focus on literary analysis. Other types of writing will include journal entries, paraphrasing, and summarizing.

Mathematics

The Dedham Middle School mathematics instructional program is based on the Massachusetts Framework for Mathematics and incorporates the Common Core State Standards for Mathematics. Five courses of study are offered in Mathematics at Dedham Middle School. Students are placed in to leveled classes in Mathematics beginning in grade 6. The accelerated level in **grade 6** indicates a faster pacing of the curriculum, not a completely different curriculum. In **grade 7** students placed in to level 1 for Mathematics will be enrolled in the Pre-Algebra course, while students placed in to level 1 for Mathematics in **grade 8** will be enrolled in the Algebra I course. Grade 7 students will otherwise be enrolled in Course 2 and Grade 8 students will otherwise be enrolled in Course 3.

GRADE 6 MATHEMATICS

LEVEL 1

This course is offered to students who have mastered the fifth grade standards for mathematics and have well-developed study habits. Students should be enthusiastic about learning mathematics and require little review of previously learned and newly introduced topics. Students who master the contents of this course will explore and master the topics listed for the Level 2 course (listed below) but at a quicker pace with additional enrichment opportunities built in to the curriculum. *Initial enrollment in this course is based on the recommendation of the students' fifth grade teachers.*

LEVEL 2

This grade level course is designed for students who have mastered the fifth grade standards for mathematics. Students who take this course in the sixth grade are prepared to take Grade 7 – Course 2 mathematics or could be moved up to Grade 7 Pre-Algebra, based on teacher recommendation. Students will explore the following topics which meet the Massachusetts mathematics standards for grade 6.

- **Ratio and Proportional Relationships** (including understanding and using ratio reasoning to solve problems).
- **The Number System** (including multiplying and dividing fractions, computing with multi-digit numbers, and finding common factors and multiples).
- **Expressions and Equations** (including writing algebraic expressions, solving one-variable equations and inequalities, and exploring dependent and independent variables).
- **Geometry** (including solving real-world problems involving area, surface area, and volume).
- **Statistics and Probability** (including defining statistical variability and distributions and summarizing and displaying data sets).

GRADE 7 MATHEMATICS

Pre-Algebra (Level 1)

The purpose of this Pre-Algebra course is for students to build a foundation of algebraic concepts. Students will solidify their knowledge in reviewing important skills in calculation, data analysis, algebra, number sense and problem solving. Most students in this course will likely be enrolled in the Algebra I course in grade 8.

TEXTBOOK: *Math – Course 3* – McDougal Littell (2007).

Course 2

This course develops the concepts in the grade 7 standards of the Massachusetts Mathematics Curriculum Frameworks: Number Sense and Operations, Patterns, Relations and Algebra, Geometry, Measurement, Data Analysis, Statistics and Probability. The purpose of this course is for students to be introduced to more algebraic concepts and to solidify their knowledge of arithmetic in order to prepare them for Grade 8 Pre-Algebra

TEXTBOOK: *Math – Course 2* – McDougal Littell (2007).

GRADE 8 MATHEMATICS

Algebra I (Level 1)

This course deals with understanding patterns, relations, and functions. A special emphasis is placed on linear and quadratic functions. As students learn about each family of functions, they will learn to represent them in multiple ways – as verbal descriptions, equations, tables, and graphs. The student will also study polynomials, data analysis and probability. The course will develop the students' ability to represent and analyze mathematical situations and structures using symbols. The students will use mathematical models to represent and understand real world situations. The wide variety of skill and problem solving exercises ensures that students build skills and feel confident about their work.

Introduction of new concepts will be at a demanding pace with the expectation that students can apply content knowledge to solve a wide variety of problems. Students will be introduced to different problem solving techniques and expected to analyze a situation and apply the most appropriate method. Students should enter the course with a mastery of fundamental computational skills. **Prerequisite:** successful completion of the Math 8 (Course 3) curriculum in grade 7 and/or recommendation of the grade 7 mathematics teacher.

TEXTBOOK: *Algebra I* – McDougal Littell (2007).

Course 3

The curriculum begins with a focus on rational numbers and their operations, equations and inequalities. Understanding will develop through the use of models, such as algebraic tiles, number lines, and verbal models. Topics will progress to linear equations and their graphs, properties of right triangles, geometric transformations and

probability. Throughout the course topics such as real number properties, geometric formulas and averages are integrated early on and expanded throughout the course.

Introduction of new concepts will be at a steady pace. Students should be able to apply prior knowledge and skills to new material with minimal review. Students will also be expected to apply their knowledge in these areas to problem solving situations and use estimation to check the reasonableness of their answers. The number and variety of problems, which range from basic to challenging, give students the practice they need to develop their math and critical thinking skills. Prerequisite: Successful completion of the Math 7 (Course 2) curriculum and recommendation of the grade 7 mathematics teacher.

TEXTBOOK: *Math – Course 3* – McDougal Littell (2007).

Social Studies

All students at Dedham Middle School are enrolled in a Social Studies course each year. These classes are heterogeneously grouped, meaning the courses are not leveled. All curriculum guides are aligned to the Massachusetts Curriculum Frameworks for History and Social Sciences.

GRADE 6 – Ancient World History

Students will develop skills in the creation, reading and understanding of timelines and graphs, and will understand the causes and effects of major historical events. Behind all history lies geography; therefore, students will understand the role that geography plays in influencing the development of a civilization. This course focuses on providing an in-depth look at the ancient civilizations of Mesopotamia, Egypt, Israel, Phoenicia, Greece, and Rome. Students will be able to analyze fundamental elements of these civilizations, including economic systems, religion, laws, the arts, government and literature. They will be able to compare and contrast the strengths and weaknesses of each society.

TEXTBOOK: *World History – Ancient Civilizations* – McDougal Littell (2006).

GRADE 7 – World Geography

The World Geography and Cultures course is based on subject-centered content knowledge. The content included in this course covers the geography and cultures of Europe, Asia, Africa, and Latin America. In each region, the course focuses on both physical and human geography. The skills necessary for mastery of the content are: reading maps and charts, locating places, critical thinking, making connections with prior and current learning, comparing and contrasting historical figures and events, understanding cause and effect, and writing skills. The values and attitudes emphasized in the course are the understanding of how human actions affect the planet and its people, an understanding of many diverse cultures and an acceptance of cultural differences.

TEXTBOOK: *World Geography* – Prentice Hall (2000).

Grade 8 – World History I

World History I begins by reviewing the fall of the Roman Empire. The course then explores the evolution of the world from the rise of Christianity to the American and French Revolutions, including: the Middle Ages, rise of Islam, African trade communities, and the major dynasties of East Asia. Students will explore primary and secondary source information as well as art, architecture, science, inventions, and literature for each unit. Students will be asked to be reflective and analytical of events in history, making connections to their own lives. This is the first half of World History. Students who attend Dedham High School will be enrolled in World History II in grade 9.

TEXTBOOK: *World History – Connections to Today* – Prentice Hall (2001).

Science

All students at Dedham Middle School are enrolled in a Science course each year. These classes are heterogeneously grouped. The inclusion model is employed for all science classes. In consultation with the special education liaison and other specialists, homework, labs, exams, and projects are modified to meet the needs of students who are on educational plans. All curriculum guides are aligned to the Massachusetts Curriculum Frameworks for Science, Technology and Engineering.

GRADE 6

The purpose of the grade six curriculum is to lay the foundation of knowledge within each of the following disciplines: Measurement, Chemistry, and Biology. Throughout the year, students will focus on critical thinking skills such as observation, prediction, decision-making, data analysis, cause and effect and research. Lessons are designed to stress the relevance of science in everyday life.

TEXTBOOKS USED FROM THE PRENTICE HALL SERIES

Chemical Building Blocks
Cells: Building Blocks of Life
Human Biology and Health
Environmental Science

GRADE 7

The seventh grade science course develops and deepens knowledge and understanding of the sciences and provides students with the skills to be lifelong science learners. Students develop their critical thinking skills in the areas of observation, hypothesis formulation, data analysis, math applications, and use of technology. Students begin to learn how to make informed decisions about scientific concepts in their everyday lives and future endeavors.

This course explores physics, chemistry, and biology. The physics component focuses on Measurement, Motion, Nature of Forces, Work, Simple Machines, and Energy. The bulk of the curriculum covers the life sciences (biology). Units include Earth's History and Evolution; Cell structure, function, and processes; Genetics; and Taxonomy. Within the cell unit, energy is presented with an emphasis on chemistry (chemical reactions and equations of photosynthesis and respiration). The structure and function of DNA, chromosomes, and the principles of inheritance are fundamental to the genetics unit. Students study each of the kingdoms and learn how to classify all organisms in the taxonomy unit.

TEXTBOOKS USED FROM THE PRENTICE HALL SCIENCE EXPLORER SERIES

Evolution: Change Over Time
Motion, Forces, and Energy
From Bacteria to Plants
Cells and Heredity
The Nature of Science and Technology

GRADE 8

Grade 8 students are enrolled in Integrated Earth Science. The topics covered include:

- **Astronomy** (the Earth and its satellite, the moon, planets, stars, galaxies, and the universe).
- **Geology – inside** (Earth's interior, continental drift, plate tectonics, mountain building, earthquakes, volcanoes, the rock cycle, rocks and minerals).
- **Geology – outside** (changes to Earth's surface by weathering, erosion, and deposition).
- **Weather and climate** (the atmosphere, weather factors, the water cycle, meteorological instruments, weather forecasting, and current weather events like tornadoes, hurricanes, and blizzards).
- **Science and technology** (the scientific method, the engineering design process, tools, and technology applications)

Students will complete labs, written and oral projects, and daily assignments from the text or ancillary materials. All of these activities work on building reading, writing, speaking, and higher level thinking/analytic skills.

TEXBOOKS USED FROM THE PRENTICE HALL *SCIENCE EXPLORER* SERIES:

Astronomy

Inside Earth

Earth's Changing Surface

Weather and Climate

Nature of Science and Technology

Foreign Language

It is the philosophy of the Foreign Language Department that developing skills of communication will lead to understanding and acceptance of many people and cultures. With increased respect for differences comes a respect for the rights of others and an increase of self-knowledge. Students are enrolled in either French or Spanish. Each student selects a foreign language at the end of grade 5 and is expected to remain in that foreign language throughout middle school.

French OR Spanish Grade 6

The purpose of this course is to expose students to the basic language-learning skills: listening, speaking, reading and writing. The content of the course includes basic conversational vocabulary. Accurate pronunciation will be stressed. The primary focus of the course is student-centered learning in the form of oral discussion, song, individual and group presentations, projects and lab work. The course will also introduce students to the geography and culture of the French-speaking / Spanish-speaking countries of the world.

French OR Spanish Grade 7

This course develops further the aural-oral skills acquired in the sixth grade and enables the student to acquire introductory-level mastery of reading and writing skills. The content includes further development of vocabulary as well as the basics uses of nouns, verbs and adjectives. Students will participate in group activities, paired activities, and role-playing. They will be assessed through written work, lab work, projects and presentations. Homework will be given on a regular basis. Geography and culture of the French-speaking / Spanish-speaking countries will be expanded.

French OR Spanish Grade 8

This course is for those who have completed the grade 7 program. Students will continue to develop introductory-level mastery of reading and writing, as well as speaking and listening skills. Vocabulary is supplemented and reinforced. The grammar is extended to include more uses of nouns, verbs and adjectives. Students will be assessed through tests, quizzes, presentations, activities, and lab work. Homework will be given on a nightly basis. There is continued emphasis on the geography and culture of the French-speaking / Spanish-speaking countries.

Upon completion of the grade 8 courses, teachers will make the following recommendations: students should have an A- to enter the **honors** level of the second year of the language at the high school, a B to enter the **CP1** level of the second year or a C to enter the **CP2** level of the second year.

Grade 8 Seminar

Most grade 8 students are enrolled in the seminar program which includes Math Seminar, Guidance Seminar and Library/Media Seminar. The only students not enrolled in Seminar are those who are enrolled in specialized reading or courses in accordance with educational plans. Although these classes are not leveled, specific attention is given to place students within individual ability levels in Math seminar in order to provide accelerated instruction or enrichment on individual topics.

Math Seminar

This course is designed to reinforce and supplement concepts from all of the Massachusetts Framework strands for Mathematics taught in the grade 8 Math curriculum in preparation for the MCAS test in Mathematics. The curriculum is designed to remediate and/or accelerate instruction based on weaknesses or strengths identified by the team Math teacher or through results gathered from predictive and diagnostic testing from the Acuity program. In addition to reinforcing basic skills, the curriculum emphasized the development of mathematical reasoning, organization, problem solving, and communication skills. Homework is assigned each day and may include practice exercises, solving problems, reading, and studying. Quizzes and tests will include short answer and open response questions. The Writing with Colors criteria system is utilized in order to encourage students to write detailed responses. Individual projects may be assigned each term or as needed. Rubrics will be developed for projects and open response questions. The use of technology, specifically the Acuity program, is integral to the curriculum as it allows for both common assessment and individualized instruction and practice exercises to meet the learning needs of each student.

Guidance Seminar

This course is designed to allow students to explore academic, social and career interests as well as developing goals through a guided series of interactive lessons. Lessons include career interest inventories, pre-college planning, goal setting, appropriate discussions concerning adolescents, decision making and responsibility. Students will use interactive technology and be encouraged to participate in media presentations, open discussion and role play. Students will complete a series of exercises related to life after high school which are found in the course textbook *Career Choices* and the associated workbook.

Library/Media Seminar

This course aims to increase student proficiency of information and media literacy skills. Students are introduced to and given opportunities to experiment with web 2.0 tools, such as aggregators, collaborative tools, presentation tools, and drawing tools. The course is arranged into four units of study: Library Organization, Copyright, Poetry, and Research. Each unit develops students' ability to access, utilize, apply, and create knowledge in the digital world with the emphasis placed on ethics and productivity.

Computer Technology

Math Lab – Grade 6

Math Lab, which meets two days within a six-day rotation, is integration of mathematics into technology within the grade 6 math curriculum. This course, aligned with the Massachusetts State Frameworks, combines several components to enhance grade 6 students in both computer and math skills. With use of Acuity (a learning-based assessment program for math), Microsoft Office Suite (specifically Word and Publisher), web 2.0 tools, Blackboard, E-Instruction and Internet, students enhance math skills and increase software knowledge through technology driven curriculum, applying these skills to their DMS coursework. Students create journal entries; collaborate through group wikis entries and discussion on Blackboard. Students create newsletters, cards and brochures in Publisher. In addition, a comprehensive unit on Internet safety is completed. Students engage learning personal safety tips through hands-on activities, videos and class discussion through materials provided by I-Safe America. Students conclude with a 6-segment DVD interactive safety game, which supports and reviews their understanding of cyber personal safety.

Computer Technology – Grade 7

This course is designed to build on students' previous knowledge and skills using Microsoft Office Suite introduced in Math Lab – Grade 6. Students work on more in depth projects and assignments using Excel and PowerPoint. The course also teaches students effective keyboarding skills, builds on their previous knowledge of Blackboard, and continues to promote Internet safety awareness using materials and resources provided by I-Safe America. In the Internet safety unit students work on hands-on activities, watch and discuss videos, and collaborate on cyber community, cyber-bullying and predator identification issues. The culminating project is a PowerPoint on Internet safety awareness.

Computer Technology – Grade 8

The 8th grade computer curriculum emphasizes 21st Century skills enabling students to communicate, problem-solve and collaborate in an ever-complex global society. The main purpose of this course is to give students effective skills to support web based research projects, such as how to evaluate a website for accuracy, and how to create a correctly formatted citation. Students complete various class activities as well as use a variety of software programs and websites to support this goal. The course culminates in a final project in which students choose a topic, research it, create a Power Point, and then present it to the class.

Industrial Technology

Video Production

This semester long course introduces 8th grade students to the basics of video production and visual storytelling. Students will learn how to create, plan, write, record, and edit short videos in a variety of genres from narrative to non-fiction. Basic camera operation, film and video grammar, non-linear editing skills (iMovie, Moviemaker and Final Cut Express), and collaborative skills are taught. Additionally, students practice critical thinking and problem solving in reviews of each other's work. The class begins with a series of scene and program challenges and culminates in a final project written by the students. Final projects range from public service announcements to short dramatic videos, to documentaries. The course motivates students by using a hands-on, project and challenge-based approach to learning and teaches skills and concepts through direct instruction and modeling of desired outcomes.

Fine Arts

Music

Music is considered part of the core curriculum at the federal, state and local level. Music making creates opportunities for intellectual stimulation, learning, and reinforcement of skills, creative expression, and social interactions. Dedham Middle School offers the following classes:

GRADE 6 – General Music

This course is designed to help students develop independent singing using a range of dynamics with emphasis on beginning voice changes. Students are also taught to read notation which includes being able to recognize simple and compound meters form in music. Introduction to major and minor tonalities is included, and students are also taught to make critical evaluations. Use of Orff instruments, guitars and technology is incorporated where appropriate to help students develop skills in the creating and performing domains.

GRADE 7 – General Music

This course builds upon sixth grade learning by placing increased emphasis on the developing voice. As part of that extended development, students are taught phrasing, enunciation, expression, and articulation. Increased emphasis is also placed on reading notation, which includes more note and rest values, the addition of polyrhythms, and additional tempo, dynamic and articulation markings as well as music vocabulary. Within the creating domain, students will write simple melodies and accompaniments, and will build upon improvisational skills. Again, use of Orff instruments, guitars and technology is incorporated where appropriate to help students develop skills in the creating and performing domains.

Grade 6 – Chorus Elective

Students wishing to sing with others in a performing group may opt to take Grade 6 Chorus. In this ensemble, there is increased emphasis on voice training, reading notation, and two part singing using age appropriate literature for performance. Students will develop choral ensemble performance skills while being introduced to a varied repertoire. Chorus students will develop choral techniques and skills such as breath support, intonation, phrasing, proper posture, tonal production, balance, dynamics, diction, sight singing and musicality. As part of the curriculum, students in this ensemble are required to perform in two evening concerts as well as any festivals or other performances that may be scheduled.

Grades 7 & 8 - Chorus Elective

Students wishing to advance their choral ensemble performance further may opt to take Grades 7 & 8 Chorus. In this ensemble, there is increased emphasis on training, use and balance of changed voices, reading notation, and three-part singing using repertoire of levels 2 and 3 within the music literature classification system. Students will develop choral ensemble performance skills while being introduced to a varied repertoire. Chorus students will develop and strengthen choral techniques such as breath support, intonation, phrasing, proper posture, tonal production, balance,

dynamics, diction, sight singing and musicality. As part of the curriculum, students in this ensemble are required to perform in two evening concerts as well as any festivals or other performances that may be scheduled. Students from this ensemble may elect to audition for the *A Capella Chorus* in which vocalists are taught the challenging task of singing in parts without accompaniment.

Concert Band

Students will develop instrumental ensemble performance skills while being introduced to a varied repertoire. Band students are taught the fundamentals of good ensemble playing, such as posture, dynamics, intonation, phrasing, balance, tone, articulation and musicality. Members of the band are expected to practice daily, attend all rehearsals and performances, and show continuous improvement throughout the year. Performances are the final outcome of the students' in-school instruction; therefore, all performances are required as part of the curriculum. The band is divided into several divisions:

- **Grade 6 Band** – open to new beginners and students who began instruction in the elementary school, this band focuses on pedagogical skills and performance of repertoire of at least level 1 within the music classification system.
- **Grade 7 & 8 Band** – pedagogical instruction will continue, but repertoire will focus on at minimum levels 2 and 3 of the music classification system. Students may also participate in an adjudicated festival.
- **Jazz Ensemble (Show Band)** – in this ensemble, students are accepted by audition. Here they will learn about music indigenous to America, and will embark upon learning to perform various jazz styles. Performance at concerts, community events, and festivals is required.

String Ensemble

A newer program to Dedham Middle School, this ensemble is open to students wishing to learn a stringed instrument (violin, viola, cello or bass). Students receive proper pedagogical instruction, and learn appropriate beginning repertoire for performance. Again, performances are required as part of the curriculum.

Visual Arts

In the middle school visual arts curricula, students experience a variety of media and artistic styles through individual exploration. Students acquire the essential skills to create two and three-dimensional works, select and use needed arts to create specific effects, create compositions that reflect knowledge of the elements and principles of art. Students demonstrate the ability to develop artistic ideas from imagination to a finished form. Students use analytical and critical thinking to develop criteria for evaluating art.

Basic concepts are emphasized. The concepts to be covered are line, shape, color, form, texture and composition. The disciplines include drawing, printmaking, ceramics, sculpture, and art history.

Grade 6

The emphasis in sixth grade is acquiring skills related to observation. Projects that enhance these skills include: drawing from life and nature, cartooning, painting, and collage making. The students explore color through a variety of media such as tempera paint, watercolors, oil pastel and paper. Three-dimensional pieces are created using clay, paper and found objects. Art history is incorporated into the sixth grade social studies curriculum focusing on the ancient world. The primary focus of the sixth grade program is to develop an appreciation for the visual arts, thus creating lifelong art enthusiasts.

Grade 7

The concepts learned in the previous years are developed. Students continue to strengthen their observational skills through a series of drawing from both life and photos. Printmaking skills are enhanced by more sophisticated techniques. Students work much more with materials and subjects of personal interest.

Grade 8

The eighth grade students will continue to strengthen their observational skills through a series of assignments from both life and photographs. Class assignments become more sophisticated and require the use of more advanced techniques. Students are allowed freedom to create, with more options related to subject matter and medium. At the eighth grade level, students will maintain a portfolio of artwork that demonstrates a progression of ideas and skills.

Physical Education and Health Education

Physical Education – Grades 6, 7 & 8

The physical education curriculum is based on learning and practicing skills through cooperation. Social and motor development is emphasized in all activities. Team games and fitness events provide students with the opportunity to extend, refine, and apply their social skills. Students also gain the courage to take challenging risks through a variety of individual and team sports. Samples of the activities offered are:

- Badminton
- Basketball
- Soccer
- Fitness and weight training
- Beach ball
- Volleyball
- Short tennis
- Street hockey
- Flag football

Students in this course will be expected to change into proper attire for physical education class which would include shorts or sweatpants, t-shirt, and sneakers. Students will be expected to participate in the physical activities to the best of their ability. Physical education is offered to all students twice a week, for forty-seven minutes per period, in a six-day cycle. Classes are heterogeneously grouped.

Health Education – Grades 7 & 8

The grade seven and eight health education curriculum exposes students to current information relating to exercise fitness, nutrition, media literacy, substance abuse, bullying, and self-esteem. This course is designed to further develop student decision making skills in order to make healthy decisions regarding their own personal well-being. The areas of particular concern are drug use; alcohol, tobacco, inhalants, marijuana, and other illegal drugs, resistance skills, making healthy choices, balancing food and physical activity, awareness of the powerful effect of media advertising, taking a stand against bullying behavior, empowered decision making, and stress management. Students will be expected to maintain a three-ring binder for health class throughout this semester based course. Students will be expected to participate in class discussion, respond to daily writing-to-learn activities, complete topic oriented poster(s) project(s), and deliver one oral presentation for the semester. Health education is offered to seventh and eighth grade students twice a week, for forty-seven minutes per period, in a six-day cycle for one semester.