



The Harley School

MIDDLE SCHOOL

CURRICULUM GUIDE

2019–20

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The Harley School

Established 1917

Welcome from the Head of Middle School

Dear Middle School students and parents,

Welcome to the 2019-2020 school year. We are pleased to offer the Middle School Curriculum Guide and Handbook to Middle School families to keep you informed, set a positive tone for academic life, and ensure the welfare of the Middle School community. We encourage you to reference the Handbook throughout the school year.

Please carefully review the Handbook with your child(ren) before the school year. The Curriculum Guide is intended to inform and assist families. Please do not hesitate to contact me at (585) 442-1770 ext. 1161 should questions arise.

Thank you for entrusting your child(ren) to The Harley School and the Middle School team. It is a privilege to work with your child(ren). We welcome the positive contributions that they bring to The Harley School community and the Middle School.

Sincerely,

Hassan Jones, Ed.D.

Sample Student Schedule

Please note: Individual schedules vary depending on student grade level

Visualizing the Day Rotation (Grade 6 Example)

Period	A-Day	B-Day
Homeroom 20 minutes 8:10–8:30	Homeroom/ Advisory	Homeroom/ Advisory
1 75 minutes 8:30–9:45	History	Science
2 50 minutes 9:45–10:35	PE	Music Ensemble
1st Short 15 minutes 10:35–10:50	Break	Break
3 75 minutes 10:50–12:05	French	Math
Lunch 50 minutes 12:05–12:55	Lunch	Lunch
4 75 minutes 12:55–2:10	English	Art, Drama, or Music
5 50 minutes 2:10–3:00	Technology, Health, or Flextime	Technology, Health, or Flextime

Academic Teams, Advisors, Middle School Head, and Assistant Registrar

Teams

Middle School faculty members are divided into two grade-level teams, one for Grades 5 and 6 and the other for Grades 7 and 8. The small class groupings provide a comfortable atmosphere that allows faculty to better serve and nurture student needs. The teachers on each team meet once a week to discuss both academic and social issues pertinent to the class and/or individual students. Team leaders coordinate the annual camping trip/outings, as well as many of the other grade-level social activities.

Homeroom Advisor

The homeroom teacher serves as an advisor and advocate for students. The homeroom advisor/advocate collects appropriate input about the student and is the first source of contact for the parent(s) for general academic or social concerns. The homeroom advisor serves as a parent liaison and meets with parents during fall and spring conferences. Students at Harley are guided and taught by caring and dedicated faculty and staff. When an advisor has a concern about work or behavior, s/he will speak directly with the student. If there is a disciplinary problem, the student's homeroom advisor is included. Middle School teams know who student's advisors are, and communicate with him/her as often as necessary.

The central objective of the advisory system is to provide, for each student in the Middle School, at least one teacher who takes a special and continuing interest in the student's total growth. The advisor seeks to know the student not just as a student but as a person, and tries to ensure that all of the experiences at Harley contribute to their growth.

Middle School Head

Faculty teams are led by the Middle School Head. The Middle School Head oversees the department curriculum, resources, scheduling, budget, and personnel. The Middle School Head meets weekly with the Head of School and other Division Heads. The Middle School Head communicates across departments and among the three divisions: Lower School, Middle School, and Upper School to encourage interdisciplinary connections.

The Middle School Head's duty is to lead the Middle School faculty, overseeing the academic and personal progress of every student. The Middle School Head collaborates with faculty leaders in the coordination of curriculum along with the Head of School. The Middle School Head represents the Middle School at events and functions, including Parent Council and Board of Trustee meetings. The Middle School Head is always available to students and families for academic counseling and problem-solving.

The Middle School Assistant/Registrar

The Middle School Assistant/Registrar is the parents' first point of contact with the Middle School office. General questions should be directed to the Assistant/Registrar who reports directly to the Middle School Head. The role of the Middle School Assistant/Registrar is broad and encompasses all day-to-day general office functions, including scheduling and student records.

Middle School Curriculum

English

Grade 5

Grade 5 English focuses on the three core elements of the English language: grammar, reading and writing. Students review and reinforce basic skills in spelling, grammar, vocabulary, dictionary usage, reading and composition. Grade 5 English introduces basic research skills and the use of reference materials to aid students in writing reports. Students broaden their comprehension by reading a variety of novels. Through these novels, students work on characterization, plot, setting, and theme while improving comprehension and vocabulary. Students learn to edit, revise, and proofread their written work, which is based on the elements in the novels and literary genres. Students entering Middle School learn to build a relationship with the text through class discussion and annotations in the text itself. Students continue to develop skills introduced in previous grades. Students also explore the use of figurative language in writing and the basic elements of poetry.

Bibliography

- O'Dell, Scott. *Sing Down the Moon*. Boston: Houghton Mifflin, Harcourt, 1970. Print.
- Hiaasen, Carl. *Hoot*. New York: Alfred A. Knopf, 2002. Print.
- Lowry, Lois. *Number the Stars*. Boston: Houghton Mifflin, 1989. Print.
- Raskin, Ellen. *The Westing Game*. New York: Scholastic, 1978. Print.
- Ryan, Pam Munoz. *Esperanza Rising*. New York: Scholastic, 2000. Print.
- George, Jean Craighead. *My Side of the Mountain*. Puffin Books, 1998. Print.

Grade 6

Grade 6 English continues to strengthen and build upon the foundation set in place by the fifth grade study of the English language. Students broaden comprehension by reading a variety of novels. Through these novels, students work on characterization, mood, and theme, improving comprehension and vocabulary. Students learn to recognize all eight parts of speech in fifth grade; and begin to understand the usage of these elements and the essential part they play in sentences. Students begin an in-depth study of grammar by focusing on subject-verb agreement, sentence structure, and editing usage more carefully. Students continue to edit, revise, and proofread written work that is based on literary genres and various types of writing. Students further explore the use of figurative language in writing and the basic elements of poetry.

Bibliography

- Curtis, Paul. *The Watsons Go to Birmingham*. New York: Random House, Yearling Press, 1963. Print.
- Law, Ingrid. *Savvy*. New York: Penguin Group, 2008. Print.
- Mass, Windy. *Jeremy Fink and the Meaning of Life*. New York: Little, Brown and Company, 2006. Print.
- Rawls Wilson, *Where the Red Fern Grows*. New York: Random House, Yearling Press, 1996. Print.
- Spinelli, Jerry, *Who Put that Hair in My Toothbrush?* NY, Little, Brown & Company, 2000. Print.
- Avi, *Nothing but the Truth*. New York Scholastic 2010. Print.

Grade 7

Students in Grade 7 English read a variety of genres including a play, short stories, poetry, fiction, and historical fiction. Grade 7 also marks the first year our English students study Shakespeare. The approach to studying literature includes many techniques: small and large group discussions, cooperative group work, and independent written responses with a broad range of assignments. Students write daily in class on literature using an array of styles: creative, persuasive, descriptive, narrative, expository, and literature response. Students learn about the structure of paragraphs and essays, organization, voice, content, word choice, sentence fluency, and conventions of language. Each class begins with a poem. Grade 7 is the first year of letter grades and exams. Representative texts include:

Bibliography

- Anderson, Halse. *Fever-1793*. New York: Simon & Schuster Books for Young Readers, 2002. Print.
- Collins, Billy. *Poetry 180: A Turning Back to Poetry*. New York: Random House, 2003. Print.
- Hinton, SE. *The Outsiders*. New York: Viking Press, Dell Publishing, 1967. Print.
- Lowry, Lois. *The Giver*. Boston: Houghton Mifflin, 1993. Print.
- Pollan, Michael. *The Omnivore's Dilemma: The Secrets behind What You Eat, Young Reader's Edition*, New York: Penguin Group. 2009. Print.
- Shakespeare, William. *Macbeth*. England, 1603-1607. Print.
- Taylor, Mildred. *Roll of Thunder, Hear My Cry*. New York: Penguin Group, Dial Press, 1976. Print.

Grade 8

Grade 8 English students read from many genres including plays, short stories, poetry, and fiction. The approach to studying literature varies, including large and small group discussion, cooperative group work, and independent written responses to a broad range of assignments. Students write daily in class on the literature introduced, using a variety of styles including: creative, persuasive, descriptive, narrative, expository, and literature response. Grade 8 students learn about the structure of paragraphs and essays,

organization, voice, content, word choice, sentence fluency, and conventions of language. Representative texts include:

Bibliography

Cisneros, Sandra. *The House on Mango Street*. New York. Random House, 1991. Print.

Collins, Billy. *180 More: A Turning Back to Poetry*. New York: Random House, 2003. Print.

Dickens, Charles. *A Christmas Carol*. England, 1843. Print.

Keyes, Daniel. *Flowers for Algernon*. San Diego: Houghton Mifflin Harcourt, 1966. Print.

Lee, Harper. *To Kill A Mockingbird*, New York: HarperCollins, 1960. Print.

Shakespeare, William. *Othello*. England, 1603. Print.

Zusak, Markas. *The Book Thief*. New York: Knopf, 2006. Print.

Writing

Grade 5

Grade 5 students are required to take a one-trimester course which focuses on writing, word study, and speaking skills. Students practice working through the writing process, developing paragraphs with a topic sentence supported by detail; and experiment with a variety of genres (biography, science fiction, fantasy, etc.) and styles (expository, narrative, explanatory, etc.). Through daily editing practice, students learn the key strategies for improving the written word. Word study includes word derivation, homonyms, antonyms, and synonyms. The course supports the continued acquisition of the student's ability to understand and use the English language.

History

Grade 5

History in Grade 5 emphasizes the connections between physical geography and social, cultural, and economic factors. Throughout the year, students learn basic geographic concepts and skills. The initial concepts include absolute and relative location, the physical and human characteristics of different places, the interaction humans have with their environment, the movement of people, goods and ideas, and how a region is defined. These concepts are consistently referred to as the students work their way through Mexico and North America. Students also examine the Maya, Aztec, and Inca civilizations. Particular attention is paid to systems of government, religion, agricultural methods and the cause of a civilization's decline. North American studies focus primarily on the major regions of the United States, combining geography, history, and the relationships between environment and culture. Grade 5 students study maps and engage in many activities that focus on latitude, longitude, hemispheres, time zones and landforms.

Grade 6

History in Grade 6 focuses on ancient civilizations. The year begins with a look at how scientists use archeology to uncover and explain evidence of the human past. Students continue with a look at the most important of all changes, the Agricultural Revolution. Students explore why hunter-gatherers settled down and began to farm and the impact farming had on people's lives. Most of the Grade 6 year is spent exploring the earliest major civilizations of many regions of the world. The study of the development of agriculture, government, communication, social system, and religion shapes students' views of ancient civilization. Course work covers Egypt, Mesopotamia, China, and India. As students look at each civilization, they compare development among each group, gradually understanding a list of key evolutionary elements—the essential building blocks of all early civilizations. Grade 6 History introduces students to the systematic study of ancient civilizations.

Grade 7

Grade 7 History explores the United States from pre-Columbian Native American culture through the Civil War. Particular attention is paid to the collision of cultures as Native Americans encountered new arrivals from Europe, the alienation of American colonists from the British government, the post-independence creation of a new political order, the Jacksonian expansion of democracy, sectional tensions over the question of slavery, and the Civil War. Grade 7 is the first yearlong chronological treatment of a single topic, rather than a series of separate units. Grade 7 is also the first year of cumulative exams and letter grades. Students take a midterm exam in February that covers the first half of the year, and a final exam in June covers the second half of the year. The class is marked by an important shift away from in-class projects and games, in favor of discussion and debate. Extensive use is made of source documents, paintings and photographs, documentary films, and music. Homework is more frequent and demanding. A variety of methods are used for managing reading assignments including: summaries, notes, outlines, timelines, and short essays. The class also keeps track of current events.

Bibliography

Bowe, Bert; Lobdell, Jim. *History Alive! The United States*. New York: Teachers' Curriculum Institute, Columbia Teachers College, 2002. Print.

Grade 8

Grade 8 students learn about modern Africa, Asia, and Latin America, looking for patterns that help us understand why there are rich and poor countries. We will compare two theories about the origins of wealth differences throughout the year, Jared Diamond's theory of *Guns, Germs, and Steel*, and Daron Acemoglu and James Robinson's competing theory from their book, *Why Nations Fail*. The course begins with a look at rich and poor countries in the world today, and then turns to European exploration between 1480 and 1850. What compelled exploration? Why were peaceful trade relations established in some regions, while attacks were more common in others? How and why did some groups dominate others? How did exploration and colonization shape the current world order?

In each region, case studies are presented to highlight aspects of people’s experiences. The history of Latin America is revisited, building on the introduction from the previous year. Students explore how North and South America took divergent paths, the decline of dictatorships, and the rise of market economies. The study of Asia spotlights experiences in India and China. While studying India, students examine the role of Mohandas Gandhi’s nonviolent rebellion against colonial rule and learn about the devastating effects of religious strife. The China unit covers the decline of the ancient imperial system, the period of turmoil that followed, and the replacement of the old system with Communism. Students also learn about China’s incredible growth over the past 30 years and the problems resulting from that rapid change. The study of Africa focuses on Kenya, South Africa, and South Sudan. Students view three films in the course to develop a more personal understanding of how big events shape the lives of typical people. Considerable class time is devoted to current events. Grade 8 history is taught in a seminar format, favoring discussion during class time.

Bibliography

Beck, Roger B.; Black, Linda; Krieger, Larry S. *Modern World History – Patterns of Interaction*. San Diego: Houghton Mifflin Harcourt, 2002. Print.

Diamond, Jared M. *Guns, Germs, and Steel: The Fates of Human Societies*. New York: W. W. Norton & Company, 1999. Print.

Acemoglu, Daron; Robinson, James. *Why Nations Fail*. New York: Crown Business, 2012. Print.

Park, Linda Sue. *A Long Walk to Water*. Boston: Clarion Books, 2010. Print.

Media

Gandhi. Dir. Richard Attenborough. Perf: Ben Kingsley, John Gielgud, and Candice Bergen. Goldcrest Films, 1983, Film.

To Live. Dir. Yimou Zhang. Perf. You Ge, Li Gong, Ben Niu. Shanghai Film Studios, 1994, Film.

The Mission. Dir. Roland Joffe. Perf. Robert De Niro, Jeremy Irons, Ray McAnally, Warner Bros., 1986, Film.

Middle School Foreign Language Curriculum

The Middle School foreign language curriculum provides students a strong foundation for Upper School foreign language studies. All Middle School students are required to study a foreign language. Grade 5 students are introduced to foreign language with one trimester of French and one trimester of Spanish. The goal is to enable students to make an informed decision before choosing the individual language studied during Grades 6, 7, and 8. Students focus on grammar, history, and culture while working on speaking, listening, reading, and writing. In Grade 8, students are also required to take a one-trimester introductory course in Latin, in addition to the French or Spanish course. This introduction to Latin helps students make a more informed decision of which language to continue in Upper School: Latin, Spanish, or French.

Middle School Language Curriculum

	Regular Sequence	Requirement
Grade 5	French and Spanish	1 Trimester of each language.
Grade 6	French or Spanish	3 Trimesters of selected language.
Grade 7	French or Spanish	3 Trimesters of selected language.
Grade 8	French or Spanish, and Latin	3 Trimesters of selected language and 1 Trimester of Latin.

French

Grade 5

Students gain an understanding of French in this trimester course. Previous experience with the language is not required. Students learn basic vocabulary and grammatical structures. Topics of vocabulary study include greetings and introductions, alphabet, calendar, weather and seasons, geography of France and the French speaking world, and numbers. The course allows students to practice the five areas of a foreign language: reading, writing, listening, speaking, and culture. These areas of study are reinforced through in-class activities including role-play, skits, projects, games, cooperative activities, and videos. Successful completion of homework assignments also plays a role in the student's performance.

Textbook

Bon Voyage 1, New York: New York: McGraw-Hill, 2001. Print.

Grade 6

In this full-year course, students begin the required French sequence that continues through Grade 11. In French 6, students begin the year with a review of material from French 5. The course allows students to continue their practice of the five areas of a foreign language: reading, writing, listening, speaking, and culture. These areas of study are reinforced through in-class activities including role-play, skits, projects, games, cooperative activities, and videos. Successful completion of assigned homework plays a significant role in the student's performance on assessments. It is recommended that students complete a summer packet in preparation for review in French 7.

Textbook

Bon Voyage 1, New York: New York: McGraw-Hill, 2001. Print.

Grade 7

In French 7, students begin the year with a review of material from French 6 and the summer packet. Students continue to work with the text, *Bon Voyage*; students should complete

chapters 5–9. The curriculum includes themes related to shopping at indoor and outdoor markets, clothing, and travel. Students begin to explore grammar usage, practicing five areas of a foreign language: reading, writing, listening, speaking, and culture. The greatest emphasis is placed on writing and speaking. Students practice writing short compositions in the target language. Successful completion of assigned homework, daily review of grammar and vocabulary, and in-class participation and preparation play a significant role in the student’s performance on assessments. There is a final exam in June. An overall average of 73% is required to move to the next level of study in foreign language. Students should complete a summer packet in preparation for review in French 8. Grade 7 is the first year of letter grades and exams.

Textbook

Bon Voyage 1, New York: McGraw-Hill, 2001. Print.

Grade 8

In French 8, students begin the year with a review of material from French 7 and the summer packet. The curriculum includes lessons on cultural and leisure activities, sports and health and medicine. Grade 8 students continue the practice of the five areas of a foreign language: reading, writing, listening, speaking, and culture. The greatest emphasis continues to be placed on writing and speaking. Students routinely complete writing assignments and make presentations. Successful completion of assigned homework, daily review of grammar and vocabulary, and in-class participation and preparation play a significant role in the student’s performance on assessments. There is a final exam in June.

Textbook

Bon Voyage: Level 2, New York: McGraw-Hill, 2001. Print.

Spanish

Grade 5

Grade 5 students gain an understanding of the study of Spanish in the Middle School environment in this trimester course. Previous Spanish experience is not required. Students are introduced to the basic sounds and flow of the language as well as the geography and cultures of the Spanish-speaking world. Students practice the four skill areas of listening, speaking, reading, and writing. Class members are encouraged to be actively engaged in a variety of learning situations, which include dialogues and skits, cooperative learning groups, personal presentations, games, and various full-class interactive exercises. Students are introduced to basic grammatical structures and vocabulary. Topics covered are: the alphabet, greetings/farewells, learning to say where you are from, days of the week, months of the year, seasons, weather patterns, and the verb “to like.” Instruction is conducted in context so that the students make connections between their own culture and the Hispanic culture as they learn the language.

Grade 6

Sixth grade begins a yearlong Spanish sequence that continues through Grade 11. Prior knowledge of Spanish is not required. The skill areas: listening, speaking, reading, and writing are addressed at a foundation level. Students actively engage in a variety of learning situations, which include: dialogues and skits, cooperative learning groups, personal presentations, games, and various full-class interactive exercises. Students are responsible for regular homework preparation and independent home study/review. There are regularly announced quizzes and tests and/or projects to assess understanding of and ability to actively apply the material. Students study and practice the following topics: the alphabet, greetings and farewells, introduction of self and others, the contrast of formal versus informal address, numbers numbers from zero to one hundred, days and dates, personal description, family relationships, clothing, and school materials. Major grammar concepts include: gender of nouns, agreement of articles and adjectives, subject pronouns, and the conjugation of regular and irregular verbs, possession, and word order for statements and questions.

Textbook

Descubre, 2nd Edition, Massachusetts: Vista Higher Learning. 2014.

Grade 7

The Grade 7 Spanish class begins the year with a review of material covered in Grade 6 using the summer packet and other teacher-produced materials. Emphasis is placed on improvement of the students' pronunciation and comprehension of both written and spoken Spanish. Students are responsible for regular homework preparation and independent home study/review. There are regularly announced quizzes and tests and/or projects to assess understanding of and ability to actively apply class material. Classroom activities continue to include oral drills, written exercises, role playing/dialogues, games, and videos. During the course, students encounter more complex grammar/syntax, including: the recent past, the future tense, object pronouns, stem-change verbs, comparison of adjectives, demonstrative adjectives, and conjugation of regular and irregular verbs. The vocabulary for this course includes: sports and hobbies, travel and vacation, weather, seasons, clothing, and transportation. Students continue to expand awareness of the Spanish-speaking world via current events, music, literature in translation, and movies. Grade 7 is the first year of letter grades and exams. There is a final exam at the end of the year. Students must attain an overall minimum year's average of 73% to move onto the next level of study.

Textbook

Descubre, 2nd Edition, Massachusetts: Vista Higher Learning, 2014.

Grade 8

The Grade 8 class year begins with a review of the material covered in Grade 7 using the summer packet, the text, and other teacher-produced materials. Emphasis is placed on

continued improvement of the students' pronunciation and comprehension of both written and spoken Spanish. Students are responsible for regular homework preparation and independent home study/review. There are regularly announced quizzes and tests and/or projects to assess understanding of and ability to actively apply material. Classroom activities continue to include oral drills, written exercises, role playing/dialogues, games, and videos. Students encounter even more complex grammar/syntax, including: reflexive verbs, indefinite and negative words, double object pronouns, comparatives and superlatives, the past tense of irregular verbs, and pronouns after prepositions. The vocabulary for this course includes personal grooming, food, ordering in a restaurant, stages of life and celebrations. Grade 8 expands on awareness of the Spanish-speaking world via current events, music, literature in translation, and movies. There is a midterm in February and a final exam at the end of the year. Students must attain an overall minimum year's average of 73% to move onto the next level of study.

Textbook

Descubre, 2nd Edition, Massachusetts: Vista Higher Learning, 2014.

Latin

Grade 8

Latin 8 is intended to provide students with a brief introduction to the study of Latin. Eighth grade students take Latin every B day for one trimester. This is a beginning course that covers basic grammar and vocabulary, derivative study, and various aspects of Roman culture, including daily life, history, and mythology. Evaluation is based upon participation in classroom exchanges, participation in prepared or spontaneous oral exercises, homework, writing exercises, group and individual projects, quizzes, tests, and student notebooks. Brief homework assignments are given daily at this level.

Textbook

Oxford Latin Course Part 1, New York: Oxford University Press, 1996. Print.

Middle School Mathematics Curriculum

	Regular Sequence	Accelerated
Grade 5	Math 5	
Grade 6	Math 6	Pre-Algebra
Grade 7	Pre-Algebra	Algebra
Grade 8	Algebra	Geometry

Mathematics

Grade 5

The content of the course is a rigorous Grade 5 curriculum. Addition, subtraction, multiplication, and division of whole numbers, fractions, and decimals are taught. Geometry, probability, percents, proportions, and ratios are introduced. Graphing is done as an enrichment activity, as are the Math Olympiads and special projects given to the students during the course of the year. Topics include: number theory, estimation and calculation; geometry exploration, fractions, decimals and percentages; collecting and working with data, division, ratios, exponential notation, coordinates, perimeter area and volume; algebra concepts and skills; and ratios, proportions, percentages; and some probability. Lessons are presented and reinforced in the classroom by using practice materials. Homework is assigned each class and is reviewed the following session. Projects are done in class with one or two partners, and the work is supervised and evaluated as the year progresses. Games and activities are used as motivational tools to keep the students solid in their facts and interested in math. Math Olympiads are given frequently for practice to challenge abstract reasoning skills. Grade 5 students are entered into the monthly contests throughout the winter.

Textbook

Math Gr 5, Boston, Massachusetts: Houghton Mifflin, 2005. Print.

Grade 6

Course Description: The curriculum for Grade 6 is similar to Grade 5, but incorporates more sophisticated algorithms, and prepares students for formal algebra. The content of the course is mainly pre-algebra, but also emphasizes advanced arithmetic and pre-geometry. However, it differs from typical pre-algebra courses in its strong emphasis on application of elementary algebraic and geometric concepts and skills to the solution of real-world problems, with additional attention to the historical/cultural origins

of modern mathematics. It also incorporates computer applications and the use of diverse modes of representation of mathematical relationships. Two major projects, the Million Dollar Project in the fall, and the Games Project in the spring, are integrated into the curriculum. Probability, permutations, and combinations are also introduced. Olympiads supplement course work. Similar to the previous course, Grade 6 students are entered into the monthly contests throughout the year.

Textbook

Math Gr 6, Boston, Massachusetts: Houghton Mifflin, 2005. Print.

Pre-Algebra, Upper Saddle River, New Jersey: Prentice Hall, 2004. Print.

Grade 7

Course Description: Students explore various topics in algebra and geometry in greater depth. The content of the course could generally be described as applied arithmetic, pre-algebra and pre-geometry. The course introduces students to the methods of algebra, including factoring, solving algebraic equations, and graphing linear equations. At the same time, students apply these methods to real world problems. The course incorporates topics from statistics, game theory, and applied mathematics. In addition to studying and applying algebra, students also examine some of the ideas in the field of geometry. Topics include area and volume, right triangles, trigonometry, and spatial thinking. Accelerated students complete the algebra course (see Grade 8) in one year. Grade 7 is the first year of letter grades and exams.

Textbook

Pre-Algebra Upper Saddle River, New Jersey: Prentice Hall, 2004. Print.

Grade 8

Course Description: In this course, students learn to evaluate, simplify, and factor algebraic expressions, to solve linear equations, inequalities and quadratic equations, and to manipulate and simplify exponential and radical expressions. Additionally, students are taught how to apply these principles to solve real-world problems and to develop strategies for decoding and solving word problems. The goal for the class is to go beyond learning the basics and to prepare the students for success in future math classes and beyond. Students engage in both independent and group work. Students are expected to work through the following skills: problem solving, constructing and communicating well organized arguments, solving higher level problems, and collaborating with classmates.

Textbook

Algebra, 2nd Edition Upper Saddle River, New Jersey: Prentice Hall, 2001. Print.

Accelerated students take a geometry course that challenges them to write original proofs and to apply algebraic principles to solve geometric problems. Students learn to apply

deductive reasoning as a method to prove theorems associated with parallel lines and planes, congruent triangles, quadrilaterals, similar polygons, right triangles and circles. Students sometimes use the computer program Geometer's *Sketchpad* to discover geometric properties. Students also learn to construct basic geometric figures using a straightedge and compass and to find the areas and volumes of plane figures and solids. Additionally, it is hoped that students learn to appreciate the geometry of Euclid and see it as an ancient, yet still meaningful, way to look at the world.

Textbook

Geometry, Boston, Massachusetts: Houghton Mifflin, 2001. Print.

Middle School Science Curriculum

Regular Sequence

Grade 5	General Science: Ecology
Grade 6	General Science: Earth Science
Grade 7	Life Science
Grade 8	Physical Science: Chemistry and Physics

Science

Grade 5

Science 5 is a lab and activity-based general science program with a year-long emphasis on the study of the interactions between organisms and their environment over time. Through building living terrestrial and aquatic ecosystems in the classrooms, students can observe change on a weekly basis. Throughout the year, students use Allens Creek and the surrounding woods as an outdoor lab, including observing relationships between living things and assessing the creek's health. Students discover the world's interconnections by studying individual species' biomes, and the overarching concepts of ecology. The final unit focuses on the importance of water in our world, how water pollution can impact ecosystems and how students can take action to mitigate pollution. Students develop individual science experiments to delve into the process of doing science and what needs to be considered to investigate various questions.

Grade 6

Grade 6 students work with a wide range of general science concepts in a hands-on, project-focused program. Using the guiding question “How do models help us understand our world?” students investigate earth science including meteorology and climate change, geology, and astronomy. This course provides the knowledge, skills and habits of mind needed for investigating scientific questions and problem-solving. The development of an ability to express scientific understanding in writing, as well as orally and graphically, is continually practiced. The course culminates in a models project where students research and design their own earth science model and evaluate its strengths and weaknesses.

Grade 7

This course involves the study of many different life forms with emphasis on the progression from simple to complex systems. We will begin the year focusing on the structures and functions of cells and end the year studying the human body. Heredity and genetics fall in between these topics; and homeostasis and interdependence will be stressed as we examine different life forms through a systems approach. Environmental sustainability topics and engineering challenges will be intertwined within each of these themes. This course offers students a hands-on and minds-on approach to learning life science where laboratory activities will both introduce and reinforce more abstract ideas. Students practice a variety of scientific skills such as methods of inquiry, observational skills, teamwork skills and the numerous techniques used in the scientific process to prepare them for their future course work in Grade 8 and beyond.

Grade 8

“Physical Science” is a lab-oriented course for Grade 8 students focusing on concepts in chemistry and physics. The purpose of the course is to expose students to various modes of experimentation providing the foundation for laboratory work. Students begin by performing experiments which build upon and reinforce basic concepts of mass, volume, and density. From these beginning exercises, students develop an understanding of physical laws and how they interrelate. During the first half of the year, the course progresses through the classification of matter, the atomic model, and chemical bonding. The course transitions to physics where conceptual understanding grows from student experimentation with motion, velocity, and acceleration. As a result, students develop an introductory understanding of Newton’s laws of motion, energy, and energy sources. Engineering challenges are woven into the curriculum throughout the school year giving students multiple opportunities to work as a team on design challenges.

Technology

Grade 5

Technology is a trimester course. The program emphasis is physical computing in a STEAM (science, technology, engineering, art, and mathematics) setting. Students design, program, and build a variety of projects intended to provide educational experiences that “blur the lines between the physical and digital world.” Students write programs using different block-based programming languages allowing them to read sensor inputs from the measurement of various stimuli, and generate desired outputs. Programming presents students with the opportunity to create simple robots that react to sensors, giving students’ digital work a physical impact. During the course, students explore topics related to electronics and circuitry, process-based thinking (such as the scientific method and algorithm reasoning), teamwork, and design thinking. The outcomes of the technology course are dictated by the creativity of the students.

Grade 6

Technology is a trimester course for students. Program emphasis is on developing a “maker mindset” in which students see the world as a place that can be modified, built upon, or created anew; addressing needs that they identify. Students gain the ability to see objects as “hackable.” Hackable experiences are different for every class as they are dependent upon individual student interests. Past examples of hackable learning experiences are: combining drinking straws and LEDs for light-up effects; designing rockets out of paper and tape that are capable of traveling 200-300 feet; designing a toy helicopter clamp on 3D modeling software and printing and using it. During the Technology trimester, students become creators, communicators and contributors by utilizing more traditional computer technologies to share ideas through digital processes.

Health

The health program for Grades 5, 6, 7, and 8 prepares students to make good choices and informed decisions about a variety of health dimensions. Health focuses on strength based learning opportunities that include role-plays, class discussions, group work, active learning experiences, and group research on various topics.

Grades 5/6

In Grade 5, Health focuses on nutrition, bullying, communication, and social skills. In Grade 6, students explore personal nutrition habits, environmental influences, and skills in reading food labels. Growth and development/puberty are also taught — exploring the various changes that take place during this time.

Grades 7/8

Health is a graded trimester class for Grades 7 and 8. In Grade 7, students will build on the nutrition material learned in Grades 5 and 6. They will discuss the components of living a healthy lifestyle as it relates to nutrition, physical activity, and goal setting. Students will participate in a group research project on a current health event topic and present information to the class. Grade 7 also participates in the “Adopt-a-Grandparent” program at the Friendly Home four times during the trimester. Visits will focus on empathy and relationship skills. In Grade 8, a major focus will be on mental health. Students explore various mental health topics such as stress, mental health disorders, teen depression, and suicide prevention. The class practices many different stress management techniques — including aromatherapy, progressive muscle relaxation, visualization, etc. Students participate in a group research project/presentation on a current event topic. We cover addiction and teen brain development and healthy relationship skills as well.

Art

Every Middle School student takes an art class. Students engage in a variety of activities and projects designed to strengthen and expand skill, imagination, expression, creative problem solving and knowledge of artists and cultures. Students engage in lively discussions and critiques to engage in the creative process. Students experience a variety of media within the disciplines of drawing, painting, sculpture, ceramics, printmaking, glass, and digital art. Demonstrations in technique and effects are given. Students practice and apply the concepts inherent in aesthetic form and composition. Assignments are differentiated to allow for personal interpretation and individual success.

Music Ensembles

Note: All Middle School students participate in a music performance ensemble: Chorus, Band, or Strings.

Grades 5/6 Choir

Grades 5 and 6 choir students learn to sing pieces in a variety of styles, periods, and languages. The class emphasizes healthy vocal production, good diction, two-part independence, ensemble singing, musicianship, sight-reading, and basic music theory. Regular performances include the Fall Choir Concert, Candlelight, and the Middle School Spring Concert; concert participation is required.

Grades 5/6 Band

Grades 5 and 6 grade band focuses on the fundamentals of music and instrumental technique for wind, brass and percussion instruments. Students start to develop solid technique on their instruments, strive for beautiful tone, learn to read music, and work to play as an ensemble. Weekly individual or small group pullout lessons provide one-on-one instruction at each student’s skill level. Students are encouraged to take advantage of playing opportunities such as the MCSMA solo festival, the NYSSMA solo festival, and All-County ensembles. Performances include a winter instrumental concert. Regular practice is expected and concert participation is required.

Grades 5/6 String Ensemble

Grades 5 & 6 String Ensemble focuses on the fundamentals of music and bowed instrument playing technique. Weekly small group pullout lessons provide individual instruction at each student's skill level. Students learn to perform with correct posture and position. Note and rhythm reading are emphasized through the exploration of a variety of musical literature, including traditional, classical, world, and folk/fiddle music. Performances include a winter instrumental concert. Regular practice is expected and concert participation is required.

Grades 7/8 Choir

7/8 Choir students learn to sing music selected from a variety of styles, eras, and languages. The class emphasizes healthy vocal production, good diction, three-part independence, ensemble singing, musicianship, sight-reading, and basic music theory. Regular performances include the Fall Choir Concert, Candlelight, and the Middle School Spring Concert; concert participation is required.

Grades 7/8 Band

7/8 Band helps students to continue their development of individual technique and tone, as well as their ensemble playing skills. Students are expected to have at least two years of experience on their instrument, or to play at an equivalent level. The repertoire is more advanced, and regular independent practice is necessary. Students are encouraged to take advantage of playing opportunities such as the MCSMA solo festival, the NYSSMA solo festival, and All-County ensembles. Performances include a winter instrumental concert. Regular practice is expected and concert participation is required.

Grades 7/8 Orchestra

7/8 Orchestra is an opportunity for experienced string players to continue developing individual bowed instrument playing skills. Emphasis is placed on ensemble balance, posture, position, following conductor cues, and intonation. The repertoire is more advanced and regular independent practice is necessary. Performances include a winter instrumental concert. Regular practice is expected and concert participation is required.

Grade 5 Music

Grade 5 Music is a hands-on class that provides students with opportunities to enhance performing and music class experience. Listening skills are developed, and the instruments of the symphonic orchestra are researched. Students learn to read, write, and perform rhythms as well as explore American music history.

Grade 6 Music

Music 6 is a general music class that is centered on two topics: critical listening/composition activities in which students create, analyze and discuss compositions and the compositional process, and a World Music Drumming curriculum which explores Afro-Caribbean and Latin American percussion music through improvisation and ensemble playing. Hands-on drumming activity is the focus of a large portion of every class period.

Drama

The drama program encourages the students to develop their dramatic and performance skills. Students engage in a variety of theater games, playful warm-ups, improvisation, scene study, and character development, which are all designed to strengthen their awareness of dramatic arts. All of the skills presented contribute to each student's developing self-confidence, cooperation and group-skill engagement, and problem-solving abilities. Individual student's strengths and talents are recognized and curriculum is adapted to highlight everyone's unique abilities.

Grade 5

Students are introduced to a variety of dramatic techniques including group building exercises, spatial and sensory awareness, pantomime, physical movement, voice and projection, improvisation, monologues, scene study, and stage combat. Basic stage and technical skills will be introduced. Dramatic skills are then practiced through improvisational skits and scenes, original plays, monologues, puppetry, and small showcases which highlight their work each trimester. The emphasis at this grade level is on playful development of theatrical skills.

Grade 6

Students continue their study of drama by reviewing technical aspects such as improvisational techniques, voice and projection, physicality, monologues and scene study. In Grade 6, study continues with individual units covering many different aspects of drama such as neutral mask, stage combat, mime, musical theater, history of theater, monologues, Shakespeare, and technical theater. Students will also learn to develop characters by exploring conflict, objectives and motivations, and plot structure. The semester will culminate in a showcase of their work.

Grade 7

Students begin the trimester reviewing technical aspects of acting such as improvisation, pantomime, voice and projection, physicality, and character development. The trimester continues with specific units of study. For the 2017/2018 school year, playwrights and their works, speech and debate, scene writing and analysis, and

theater production will be studied. Every trimester includes lots of improvisation and drama games that encourage and develop spontaneity in acting. Monologues and short scenes are also studied and developed. There is a one-act play performance opportunity at the end of each trimester.

Middle School Production

Every year the Middle School performs a large scale theatrical production which includes up to 60 middle school students. This is usually a musical, as musicals allow for large cast participation. Over the decade, the Middle School has produced performances of a Rodgers and Hammerstein musical revue, an Evening of One-Acts, *Dear Edwina, Jr*, *The Little Mermaid, Jr*, *Once Upon a Mattress*, *The Music Man*, *Bye Bye Birdie* and *James and the Giant Peach*.

Physical Education and Athletics

Students are expected to attend and participate in all physical education classes. The Middle School physical education program provides opportunities for students to develop skills through a variety of individual and team sports. In both physical education and athletics, the most important factors are participation, good effort, and fair play. The main objective is to allow students to develop self-confidence in their abilities, understand the factors involved in skill development (training, repetition, drill) and enjoy the physical benefits of fitness. Swimming is a key component of the Harley physical education program. Students participate in a swimming unit each year. We teach all four competitive strokes, diving, flip turns, as well as water polo.

The following is a listing of other units:

Soccer	Fitness	Volleyball	Golf
Tennis	Cross Country	Badminton	Softball
Field Hockey	Cooperative Games	Basketball	Track & Field
Football	Step Aerobics	Yoga	Ultimate Frisbee
Pilates	Lawn Games	Meditation	Tae-bo
Team Handball	Harley Ball	Exercise Ball	Lacrosse
Walking	Orienteering	Relaxation	

Students in Grades 7 and 8 are encouraged to join a modified athletic team each year. Students in Grades 9 and 10 are required to join a JV or Varsity team each year. Joining more than one team sport each year and continuing participation through Grades 11 and 12 is encouraged. The athletic program is a combined effort with the Allendale Columbia School, forming "HAC Athletics," whose teams compete in the Finger Lakes Athletic Association. This league affiliation provides HAC Athletics with fair and equitable competition with schools that are comparable in enrollment size.

The HAC interscholastic athletic program offers the following modified teams for Grades 7 and 8:

Fall:	Winter:	Spring:
Boys' and Girls' Soccer	Boys' and Girls' Basketball	Boys' Baseball
Boys' and Girls' Cross-country	Boys' and Girls' Swimming	Girls' Softball
Girls' Volleyball		Boys' and Girls' Track & Field
Girls' Tennis		Boys' Tennis

For student-athletes in Grades 7 and 8 deemed “exceptional” by a coach or athletic director, the opportunity to play at the JV or Varsity level is possible, provided the following criteria are met: Middle School Head and Athletic Director approval, parent/guardian approval, and requirements for the Selection Classification Process are met.

Flex Time

Flex Time is designed to meet the individual interests/needs of students. It takes place at the end of the school day from 2:10 – 3:00 p.m. During this time period, Grade 7 and 8 students can select from various enrichment options or use the time for study hall or other independent activities. Students can choose to participate in a club, meet with teachers, work on approved projects, or sign up for a mini elective class or seminar. Flex Time opportunities change each trimester.

A few examples of Flex Time activities are:

Ceramics	Guitar	Photography
Design Thinking	Independent Music Practice	Private Lessons
Digital Art	Intramural Sports & Games	Set Design
Drama	Jazz Band	SSP
Drawing and Painting	Lego	Strategy Games
Food and Farm	Maker Space	Study Hall
Glass	Music Technology	Tutoring

Study Hall

Study halls provide a quiet place for students to complete homework, read, review their notes, and study for tests. Study Hall also provides time during the school day for students to use the library or talk with their advisor. Time spent in study hall may be used effectively if students follow these guidelines.

- Be prepared
- Be quiet
- Be respectful
- Bring outside reading

Computer Skills

Computer instruction is integrated into core course curriculum. Students visit the computer lab or use laptops in the classroom or the Library during English, history, science, foreign language, math, and music classes. The Internet, library databases, and online encyclopedias are resources throughout Middle School.

Opportunities

Community Service

Service is an integral part of the Middle School mission. Each grade level chooses an appropriate activity or project for community service. Previous choices include: Saints' Place, Foodlink, and School of the Holy Childhood.

Field Trips:

Cummings Nature Center	Mount Morris Dam	Washington, D.C
Area Museums, Theaters	Ithaca-Museum of Earth and Taughannock Falls	Niagara Falls, NY
Boston, MA	Camp Pok-O-McCready	Letchworth Park
Greenkill Education Center	Corning, NY	Mendon Ponds Park
University of Rochester		Monroe County Courts

MathCounts

Each year, advanced math students from Grades 6, 7, and 8 participate in three competitions involving local schools. The MathCounts team meets once a week before school to practice for these competitions.

Social Activities

The Student Council and Parent Council plan most social activities. Afternoons full of fun and games are planned for Grade 5 and 6 students. Several Grade 7 and 8 dances are held during the year.

Special Programs

Book Fair and Geography Bee are a few examples of special programming for Middle School students.

Summer Programs

Summer opportunities abound. Teachers from Harley and outside experts provide a variety of fun summer activities and learning opportunities. Program offerings include: day camp, academics, art, music, dance, language, sports, and drivers ed. Summer program information is available through a printed brochure and online.

Middle School Administration

Head of Middle School	Hassan Jones ext. 1160
Administrative Assistant/Registrar	Margaret Cusimano ext. 1161
Main Office Reception	Sharon DuPan ext. 0

Middle School Faculty and Staff 2019–20

Dr. Hassan Jones	Head of Middle School
Mrs. Margaret Cusimano	Assistant to Head of MS/Registrar
Grade 5 Advisors	Connie Moore, Patti Northrup, Lorie Rick, Raj Singaravelu
Grade 6 Advisors	Lee Allen '64, Andrea Cherveanak, Ann Marie Mortimer, Lindsay Worner '02
Grade 7 Advisors	Doug Gilbert '87, Sandy Ramirez, Rebecca Tracey
Grade 8 Advisors	Tierney McKee, Dan O'Brien, Carli Rivers

Special Area Teachers

Lisa Barker	Food & Farm	Sarah Kuchera	Music
Ben Burroughs	Choir	Elaine Mendola	Library
Jessica Densmore	Latin	Rita Proctor	SSP
Kima Enerson	Maker Educator	Kelly Schroeder	Strings
Linda Foster	Drama	Meg Smerbeck	SSP
Kristy Houston	Band	Jean Weber	Technology

Administrators and Other Staff

Mr. Larry Frye	Head of School
Ms. Kirsten Reader '90	Director of Admissions
Dr. Terry Smith	Head of Lower School
Dr. Hassan Jones	Head of Middle School
Ms. Kim McDowell	Head of Upper School
Mr. Lars Kuelling	Academic Dean
Mr. Peter Mancuso	Athletic Director
Mr. Ken Motsenbocker	Chief Financial Officer
Ms. Beth Bailey	Director of Marketing and Communications
Ms. Whitney Brice	Director of Development
Ms. Sisi Chen	Lower/Middle School Counselor
Mrs. Debora Houghtalen	School Nurse
Ms. Vicki Pasternak	Dining Hall Supervisor
Ms. Amanda Patterson	Assistant Director of Admissions
Ms. Christine Shields-Rossi	School Nurse
Mrs. Cheryl Skiba	Admissions Office Assistant
Ms. Maria Sommerville	Executive Assistant to Head of School