2021-2022 COURSE CATALOG

Middle School

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INTRODUCTION

2021-2022 MIDDLE SCHOOL COURSE OF STUDY

Core Academic Program

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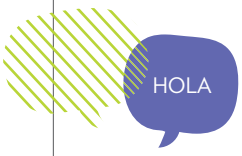
HISTORY	History 6: Young Historians and the Ancient World	History 7: Bringing the Distant Near	History 8: The Roads to Right Now
MATH	Math 6: Mathematical Ways of Thinking	Math 7: Math in Action	Integrated Math 1 (IM 1) IM 1 + 2 Compressed
SCIENCE	Science 6: Planetary Science	Science 7: Life Science	Science 8: Environmental Science
WORLD LANGUAGES 	Language Foundations (quarter rotation): • Spanish • French • Chinese • Digital Literacy	French 1A Spanish 1A Chinese 1A	French 1B Spanish 1B Chinese 1B
FITNESS AND WELLNESS	Fitness & Wellness 6	Fitness & Wellness 7	Fitness & Wellness 8
ARTS	Art 6: Creativity & Wonder (quarter rotation): • Visual Arts • Creative Movement • Film & Improv • Strings	Art 7: AMPeD Up! Art, Music, Performance & Design (2 semesters) • Video Art • Acting & Improv • Visual Arts • Web & App • Art & the Machines • Dance • Strings • Contemporary Music Foundations	Art 8: Arts & Imagination (2 semesters) • Photography • Ceramics & Sculpture • Visual Arts • Acting & Theatre • Art + Code • Game Design • Interactive Art • Film • Music & Composition Skills • MS Dance Performance Company (yearlong, by audition)

Unless otherwise noted, all courses are a full year and do not have a prerequisite.

2021-2022 MIDDLE SCHOOL COURSE OF STUDY

Integrated Learning Opportunities

SUBJECTS	6th Grade	7th Grade	8th Grade
ENGINEERING & COMPUTER SCIENCE	Coding: integrated into the math curriculum Digital Literacy: a rotation in Language Foundations Engineering: integrated into the Science curriculum	Coding: integrated into the math curriculum Art Electives • Video Art • Web & App • Art + the Machines	Art Electives • Video Art • Art + Code • Game Design • Interactive Art

SERVICE LEARNING
The mission of the Service Learning Program is to inspire students to find their passion and purpose as citizens of the world. Students actively explore different challenges that face their communities and learn to see themselves as agents of change. Each grade level investigates a different issue and culminates their exploration with a service trip and community project. • 6th Grade: Global Hunger & Food Insecurity • 7th Grade: Environmental Impact & the Los Angeles River • 8th Grade: Social Justice & Meeting Each Need With Dignity (MEND)

MIDDLE SCHOOL COURSE OF STUDY

ENGLISH

6

English 6: The Journey of Me

In this course, and with literature as their guide, students explore the intention and purpose of journeys, both their own and those in literature, as they embark on a journey of self-reflection, growth, and creative risk-taking. They study big ideas around what they believe in, who they want to be, and how their values shape their actions. Our young readers and writers practice clear and effective communication through speaking and writing and learn how to collaborate with peers constructively and respectfully. They channel their curiosity into a strong foundation for abstract thinking, questioning, and analysis, reflect on their own learning, and develop empathy of themselves and others. Alongside the texts *Fish in a Tree*, *Nevertheless, We Persisted: 48 Voices of Defiance, Strength, and Courage*, *King of the Dragonflies*, and *Race to the Sun*, our young changemakers examine central themes, such as building a growth mindset, discovering their own identity, and the power of using their voice to advocate for themselves and others.

Grade Level: 6

7

English 7: Bringing the Distant Near

This course gives students the opportunity to draw connections between the medieval and modern worlds through four units of study: place, belief, power, and gender. By examining each of these influential themes through the past and the present, students can better understand themselves and the human condition. Central texts include *The House on Mango Street*, *Flying Lessons*, and A *Midsummer Night's Dream*. The curriculum interleaves consistently with the big ideas in History 7 so students are asked to intentionally link their understanding. In addition to practicing active readership by analyzing literature for theme and characterization, students engage in the writing process by considering audience and purpose through their own writing and public speaking. With an emphasis on life-worthy learning, students regularly reflect on their own learning to gain the metacritical skills that lead to personal growth inside and outside of the classroom.

Grade Level: 7

8

English 8: Coming of Age

This course challenges students to dive into the world of abstract thinking by examining the open-ended question, "What does it mean to come of age?" To explore this notion, we will read a variety of short stories, poetry, and multicultural texts including *A Northern Light*, *The Joy Luck Club*, *A Raisin in the Sun*, *To Kill a Mockingbird*, and *Romeo and Juliet*. Through class discussions and collaborative activities, students wrestle with complex ideas and actively seek out next steps to a deeper understanding. Students tackle a wide variety of written assignments that challenge them to expand their analytical skills, apply textual evidence, and hone their voice. Frequent conferences, feedback loops, and Google Doc collaboration sessions help students revise their work to better target their audience and purpose. Connections with themes in History 8 create opportunities to build cultural competence and greater appreciation for diversity of thought and experience. Creativity is celebrated through creating interactive journals, writing poetry and stories, debating, and performing in class.

Grade Level: 8

HISTORY

6

History 6: Young Historians and the Ancient World

Sixth grade young historians journey through ancient societies such as Mesopotamia, Egypt, Greece, and more to explore what makes a civilization and draw comparisons across time periods – including through today! During their time travels, students learn the impact of bias on historical information and how new discoveries can change interpretations of the past. Students examine the importance of geography, societal structures, and religious beliefs, as well as investigate different expressions of culture, power, and gender. In alignment with their science curriculum, students learn to distinguish observation from inference, analyze source credibility, and build stronger communication and writing skills.

Grade Level: 6

7

History 7: Bringing the Distant Near

This course gives students the opportunity to draw connections between the medieval and modern worlds through four units of study: place, belief, power, and gender. By examining each of these influential themes through the past and the present, students can better understand themselves and the human condition. Central texts include primary and secondary sources from the medieval world and modern takes from contemporary thinkers. The curriculum interleaves consistently with the big ideas in English 7 so students are asked to intentionally link their understanding and skill development. In addition to practicing the skills of a historian through questioning, analyzing sources, crafting claims, and seeking out multiple points of view, students write and showcase their learning in written, oral, and creative forms. With an emphasis on life-worthy learning, students regularly reflect on their own learning to gain the metacritical skills that lead to personal growth inside and outside of the classroom.

Grade Level: 7

8

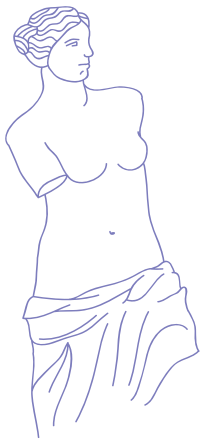
History 8: The Roads to Right Now

This course surveys United States history from the founding of the country through the late 19th century while making connections to current events and the contemporary world all along the way. Students explore the historical roots of contemporary beliefs, institutions, practices, and groups. They learn about the events and choices that have shaped the United States and are asked to reflect on how their own actions can influence the present and future of this country. Students strengthen their critical thinking skills by exploring essential questions that connect to overarching themes of the course, including "How does the past shape the present?", "What is progress?", and "Is violence ever justified?". Additional objectives of this course are to develop skills such as researching and writing, assessing source credibility, engaging in civil discourse, and practicing a variety of methods of historical analysis to prepare for the Upper School and more advanced courses of study.

Grade Level: 8







MATHEMATICS

6

Math 6: Mathematical Ways of Thinking

This course strengthens and expands basic problem-solving skills so students can confidently tackle increasingly complex mathematical challenges. Learning is active, including hands-on manipulatives, group collaboration, online practice, and real-world problem solving. The goal is for students to speak, problem-solve, and think like mathematicians. Course power standards include:

- Modeling mathematics using coding languages
- Analyzing proportional relationships and using them to solve real-world and mathematical problems
- Applying and extending previous understandings of operations with fractions to add, subtract, multiply, and divide rational numbers
- Performing operations with positive and negative numbers
- Using properties of operations to generate equivalent expressions
- Solving real-life and mathematical problems using numerical and algebraic expressions and equations
- Drawing, constructing, and describing geometrical figures and describing the relationships between them
- Solving real-life and mathematical problems involving angle measure, area, surface area, and volume
- Using random sampling to draw inferences about a population
- Drawing informal comparative inferences about two populations
- Investigating chance processes and developing, using, and evaluating probability models

Grade Level: 6

7

Math 7: Math in Action

In this course, students explore the connections between algebraic-numerical and geometric-spatial relationships using real-world applications whenever possible. Students will also explore financial math topics. Course power standards include:

- Understanding that there are numbers that are not rational and approximating them by rational numbers
- Understanding the connections between proportional relationships, lines, and linear equations
- Analyzing and solving linear equations and pairs of simultaneous linear equations
- Defining, evaluating, and comparing functions
- Using functions to model relationships between quantities
- Understanding and applying the geometry of parallel lines and angles
- Solving real-world and mathematical problems involving the volume of cylinders, cones, and spheres
- Investigating patterns of association in bivariate data

Grade Level: 7

8

Integrated Math 1

This course broadens student understanding of functions so they can dive deeper into linear models introduced in Math in Action. Students strengthen their algebraic fluency as they explore systems of equations and inequalities and model with both linear and nonlinear functions. This course provides a strong algebraic foundation so students can enter Integrated Math 2 in Upper School. Course power standards include:

- Understanding solving equations as a process of reasoning and explaining the reasoning
- Solving equations and inequalities in one variable
- Solving systems of equations
- Representing and solving equations and inequalities graphically
- Performing arithmetic operations on polynomials
- Constructing and comparing linear and exponential models and solving problems
- Interpreting functions that arise in applications in terms of the context
- Analyzing functions using different representations

Grade Level: 8

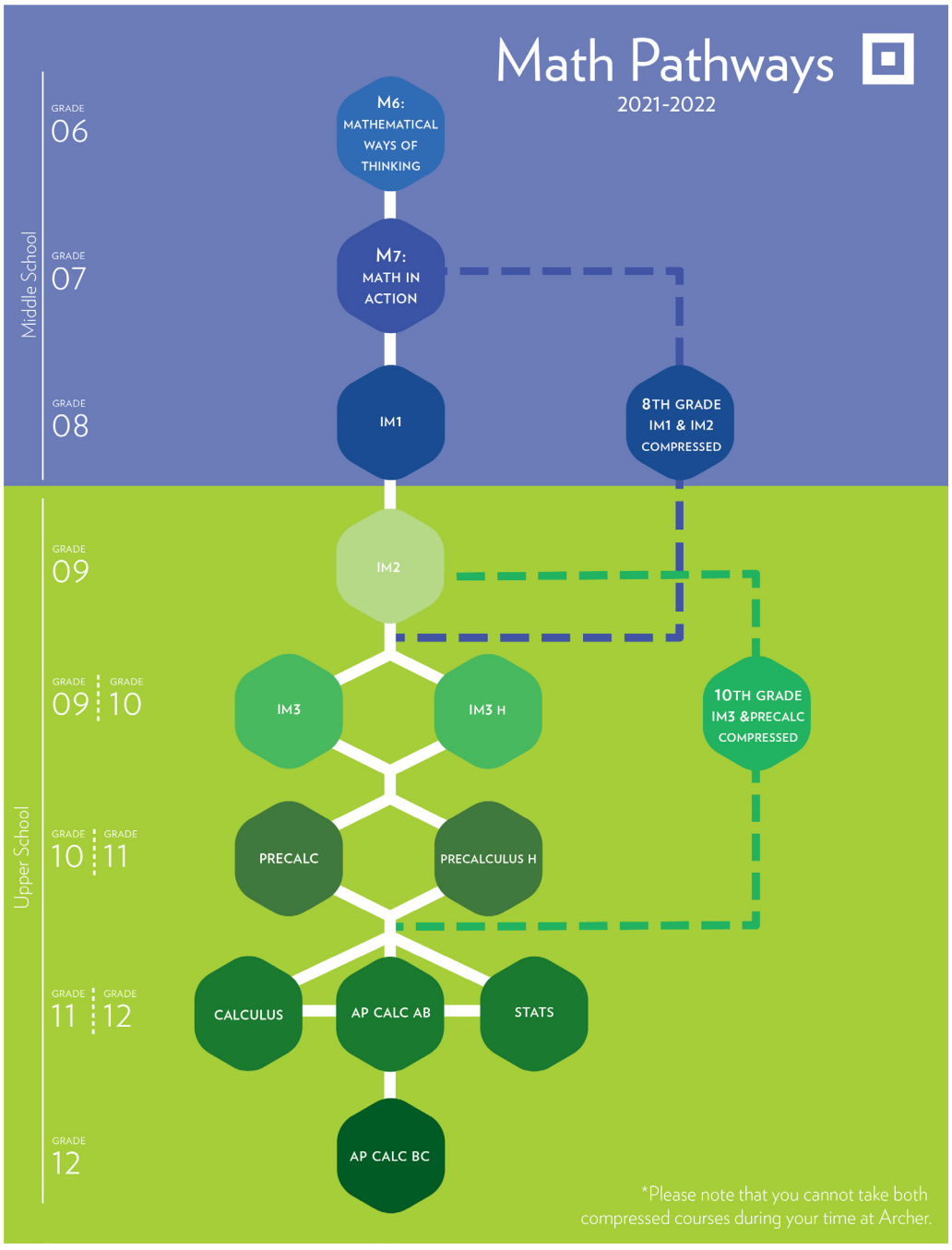
8

Integrated Math 1 & 2 Compressed

This course expands upon and extends students' understanding. This course assumes a strong foundation in linear functions to cover the entire Integrated Math 1 and Integrated Math 2 curricula and prepares students to take Integrated Math 3 next year in Upper School. Course power standards include:

- Constructing and comparing linear and exponential models and solving problems
- Interpreting functions that arise in applications in terms of the context
- Proving geometric theorems
- Performing arithmetic operations on polynomials
- Developing an understanding of trigonometric ratios through exploration of right triangle trigonometry and applying this knowledge to real-world measurements
- Building a function that models a relationship between two quantities
- Interpreting expressions for functions in terms of the situation they model

Grade Level: 8



SCIENCE

All students in grades 6th - 8th grade participate in Archer's Lil' SIS (Science Inquiry Symposium) in which they design an inquiry project, create real-world science experiments, conduct error analysis, and present to the entire Middle School community and a panel of teachers from across the curriculum.

6

Science 6: Planetary Science

Greetings, Earthlings! You have landed in 6th grade Planetary Science where student scientists learn about and tackle resource and climate issues here on Earth. Our mission begins with an interstellar voyage of stars and planets in our Milky Way galaxy. We then head safely back on our blue planet to learn about the chemical and physical properties that comprise our city and global surroundings. Using the scientific process, we will do hands-on labs to better understand Earth's geological systems. Emphasis will be placed on experimental design, data collection, and drawing conclusions from experimental results.

Grade Level: 6

7

Science 7: Life Science

This lab-based course challenges students to examine and understand the characteristics that define living organisms. Student scientists examine life from the microscopic level (cells) to the macroscopic level (the human body). Along the way, they critically evaluate common theories, perform scientific inquiry, articulate arguments in agreement or opposition to scientific principles, and develop a logical approach to problem solving. Students are encouraged to develop, test, and analyze their own hypotheses through a variety of laboratory experiments. Students then build on their knowledge of biology with an in-depth study of cells, DNA, genetics, and human body systems. Finally, the class concludes with a comprehensive examination of the reproductive system.

Grade Level: 7

8

Science 8: Environmental Science

In this course, students investigate Earth's chemical, physical, and biological systems through the lens of scientific investigation and inquiry. During the first semester, students take a deep dive into the building blocks that make up all matter in the universe. To do this, students explore atomic theory and structure, decode the periodic table, and investigate chemical interactions. Students use this knowledge to explain environmental processes of nutrient cycling, pollution, and climate change. By the second semester, students will have developed the background they need to investigate the principles of energy, forces, and motion through an in-depth exploration of the relationship between distance, velocity, acceleration, force, and Newton's laws of motion. Students will apply their knowledge of these principles to the current environmental challenges of fossil fuel use and renewable energy,

Grade Level: 8

ARTS

6

Art 6: Creativity & Wonder
Sixth grade students explore what it means to be creative by rotating through four different art courses: Visual Arts, Creative Movement, Film & Improv, and Strings. As actors, they showcase their skills in performance and improvisation. As musicians, they play classical stringed instruments and sing. And as artists, they experiment with drawing, painting, mixed media, and digital art. In combination, these four rotations free students' imaginations, strengthen their collaboration, and build strong creative problem-solving skills.
Grade Level: 6

7

Art 7: AMPeD Up! (Art, Music, Performance & Design)
Seventh grade artists choose two semester-long courses to explore in depth:

Video Art
Learn how to express ideas and emotions through video using a variety of new techniques, including: stop motion, animation, montages, framing, transitions, sound, and image manipulations.

Acting & Improv
Actors use their imagination to dream up characters, create scenes, and gain confidence on stage through improvisation, theatre games, and performance projects.

Visual Arts
Bring out your inner artist by exploring a variety of media including drawing, painting, and collage.

Web & App
Create a stylish, modern, and functional website. Explore the foundations of coding using powerful tools like HTML, CSS, and Javascript.

Art and the Machines
Learn to use new technologies to transform traditional arts in new and exciting ways as we delve into pattern, volume, color, and form. We'll explore both contemporary and classical art for inspiration as we create new works using our IDEAlab's laser cutter and 3D printers with no prerequisite experience required.

Dance
Learn the fundamentals of dance technique, performance, and choreography through ballet, jazz, modern, hip-hop, and contemporary dance.

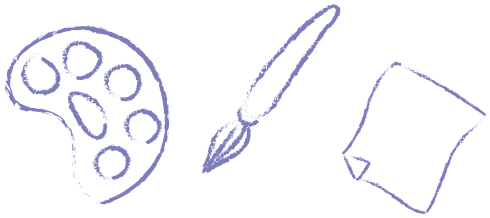
Strings
Music makers learn to play an instrument and create music together in this hands-on, collaborative class.

Contemporary Music Foundations
Students explore the foundations of pop and contemporary music by listening to, analyzing, and creating music, both live and digitally.

8

Art 8: Arts & Imagination

Eighth grade artists choose two semester-long courses to explore in depth:



Photography

Appreciate the difference between catching a photographic moment and creating one through planning, staging, and digital enhancement. Projects are designed to improve students' photographic eye and properly present images for exhibition. Dark room experience and digital tools provide a strong foundation for understanding the magic of capturing images on film.

Ceramics & Sculpture

Create a variety of sculptures using advanced sculptural techniques. Explore positive and negative space, additive and subtractive techniques, and narrative and abstract sculpture. Sculptors will have many options, including stoneware and high fire glazes, to express their creative visions.

Visual Arts

Explore and integrate a wide range of media including painting, drawing, printmaking, photography, digital imaging, and collage. Projects foster creative experimentation and challenge students to further their vision and artistic voice.

Acting & Theatre

Actors explore theatre games and improv comedy, create their own work, and experiment with acting techniques. Performance opportunities abound in this course.

Art + Code

Explore different ways to create art with code. Creative coders will use JavaScript and JS libraries to create visual art, animations, interactive programs, and generative art (where the computer creates art for you!).

Game Design

Design theories of game design and learn to code your own games. Students will create games using Scratch and Python and then make 3D games in the web browser using WebVR with A-Frame.

Interactive Art

Learn to make dynamic sculptures and visual artworks that not only inspire viewers but actively respond to touch, sound, and shadow using simple sensors to create wondrous effects. We'll combine traditional artistic techniques with contemporary technology to create truly new and engaging works with no prerequisite experience required.

Film

Gain the fundamental skills and techniques needed to create and produce high-quality, original high-definition videos. Learn advanced sound editing, lighting, and on-camera acting techniques while creating music videos, news clips, experimental movies, and short films.

Music & Composition Skills

Students will work on their music literacy and fundamental music skills by learning to play the keyboard and composing original songs. No previous experience required.

Middle School Dance Performance Company (yearlong course)

This course is designed for students with previous dance training who desire to continue improving their creative and technical skills in ballet, jazz, hip-hop, and contemporary dance. Visiting choreographers and outside professionals will polish students' skills and help with creative dance expression.
Prerequisite: By Invitation (Audition Required)

ARTS CO-CURRICULARS

6-8

MS Choir

In this group, students will sing and perform a wide variety of music while developing their vocal technique and musicianship. Students who join this group should expect to learn foundational music theory, ear training, sight reading, and notating skills. Choir is an excellent creative outlet for students who want to share their voice and connect with their peers more deeply through music. Rehearsals are after school.

Grade Level: 6 - 8
No audition required.
Full year commitment.

7-8

MS A Cappella

Members of the Middle C's, Archer's Middle School A Cappella group, will continue to develop their musicianship by performing a variety of genres in an a cappella style. While furthering their vocal technique study and aural skills, students will learn to read, notate, and arrange music. A Cappella is a perfect co-curricular for committed singers who want many performance and solo opportunities. The group meets after school and during lunch.

Grade Level: 7 -8
Prerequisite: By Audition
Co-requisite: Choir

6-8

Middle School Orchestra

Musicians explore the language of music while building their playing technique in orchestral arrangements and excerpts from symphonic repertoires. The group meets on a designated day after school. Rehearsals culminate in performances at the Winter Concert, the Spring Concert, and assemblies.

Grade Level: 6 - 8
Audition Required

6-8

MS Play and MS Musical

Middle School actors are encouraged to audition for and perform in fully-staged plays and musicals in our Baer Blackbox Theater. Rehearsals take place after school and on some weekends. Interested students can also serve as tech crew, lighting/sound support, and assistant directors.

Grade Level: 6 - 8
Audition Required

WORLD LANGUAGES

6 **Language Foundations**
In this introductory course, students will explore three modern languages (Spanish, French, and Chinese) as well as the language of digital technology. Each quarter, students will rotate through a different language with the aim of seeing how people communicate across different cultures and through the digital realm. In the language of digital technology rotation, students will build a fundamental understanding of how digital technology works and develop healthy practices of using the enabling power of digital technology to be productive, effective and responsible digital citizens. At the end of the four-class rotation, budding linguists will choose a language to study in depth through 7th and 8th grade.
Grade Level: 6

7 **French 1A**
This course focuses on speaking, reading, and writing French to communicate in meaningful real-world situations. Students explore the language and culture by writing situational dialogues, listening to popular music, and reading short excerpts from novels, magazines, and newspapers. They also celebrate French and Francophone culture through songs, role-plays, fairy tales, art, and cuisine. By the end of the course, students can communicate about themselves, their families and communities, daily routines, and preferred activities.
Grade Level: 7

8 **French 1B**
In this course, students continue their study of French through oral communication, listening comprehension, and the acquisition of vocabulary. In class, students speak, listen, read, and write in the target language. Students engage with the language and culture by writing situational dialogues, listening to popular music, and reading short excerpts from novels, magazines, and newspapers. By the end of the course, students are able to communicate about basic activities and daily life with confidence and skill.
Grade Level: 8
Prerequisite: French 1A

7 **Spanish 1A**
In this course, students build the skills to communicate in various real-life situations. Students learn to effectively ask and answer questions, engage in conversations, and narrate skits. Students contextualize language by writing situational dialogues and reading current media. The class celebrates Spanish and Latin American cultures through festivals, media, role-plays, and storytelling. By the end of the course, students will be able to convey detailed personal information including physical descriptions, daily routines, likes and dislikes, school, family, and extracurricular activities.
Grade Level: 7

8 **Spanish 1B**
In this second-level course, students expand their ability to communicate effectively and confidently in Spanish. They continue to cultivate their appreciation for and understanding of Hispanic cultures while developing their linguistic skills of reading, writing, listening, and speaking. Students in this class synthesize and apply new grammar, vocabulary, and cultural knowledge in oral presentations, role-plays, compositions, and a variety of projects. Highlights include the Día de los Muertos unit and altar project and the end-of-year Fairytale Festival.
Grade Level: 8
Prerequisite: Spanish 1A

7 **Chinese 1A**

This course introduces students to the Pinyin system and to the pronunciation of tones. Students will also learn to read and write commonly used radicals and simplified Chinese characters. The class explores Chinese culture through music, field trips, stories, and current events. Students engage in the language through songs, videos, and cultural projects. By the end of the course, students will be able to introduce themselves and carry on a basic conversation about their families, daily lives, and hobbies.

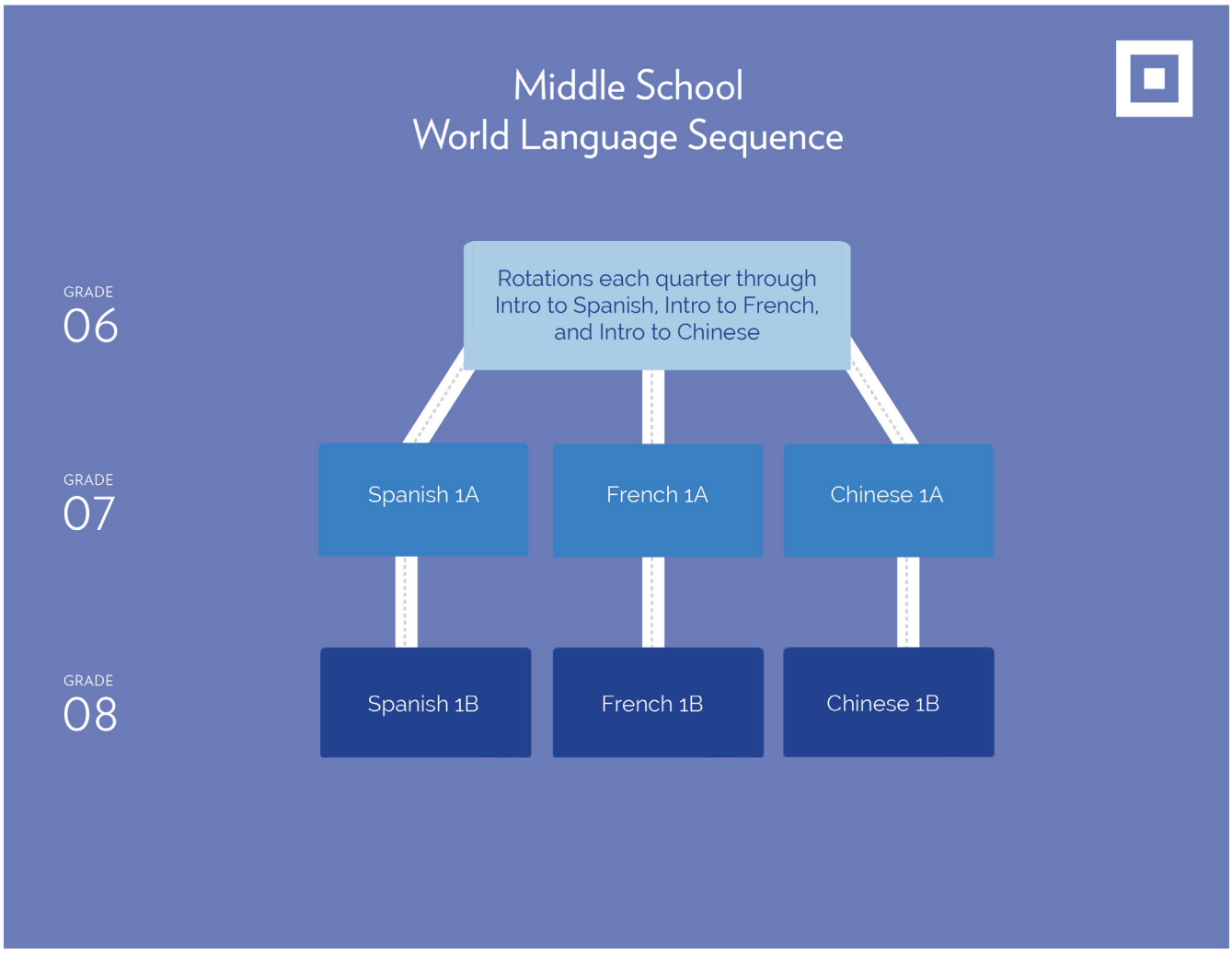
Grade Level: 7

8 **Chinese 1B**

In this second-level course, students expand their ability to communicate effectively and confidently in Chinese. Students continue to cultivate their appreciation for and understanding of Chinese culture while developing their linguistic skills of reading, writing, listening, and speaking. Students synthesize and apply new grammar, vocabulary, and cultural knowledge in oral presentations, role-plays, compositions, and a variety of projects. At the end of this course, students are able to communicate about topics such as food, clothing, sports, and pets.

Grade Level: 8

Prerequisite: Chinese 1A



FITNESS AND WELLNESS

6

Fitness & Wellness 6
In this course, students will participate in a variety of team sports such as volleyball, basketball, softball, soccer, and track and field. Students also play non-traditional sports including Ultimate Frisbee, flag football, and floor hockey. Sportsmanship, teamwork, and leadership are key elements of the class. Throughout the course, students also gain an understanding of cardiovascular health, muscular strength, and physical endurance.
Grade Level: 6

6

Human Development 6
This course provides space for students to explore their relationships with themselves and others, examine developmental changes, and build healthy habits of mind and body. Class activities include group discussions, council, games, journal writing, and mindfulness practices.
Grade Level: 6

7-8

Fitness & Wellness 7 & 8
These classes focus primarily on skills-related fitness and team sports such as volleyball, basketball, softball, and soccer. Students learn the skills and movement patterns to support participation in the after-school athletic program. Students also enjoy non-traditional activities including Ultimate Frisbee, flag football, and floor hockey. Sportsmanship, teamwork, and leadership are key elements of the class. A portion of each fitness class is designated to improve cardiovascular levels and strength. Students also learn to evaluate the elements of an efficient and effective workout.
Grade Level: 7 & 8

7

Human Development 7
Seventh grade is a year of dynamic physical, emotional, social, and intellectual change. The Human Development curriculum explores some of the challenges of this developmental stage. Discussions, council, and role play encourage students to examine their patterns of behavior and values as they pertain to peers, family, and self. Additional topics of discussion include reproduction, body image, puberty, boundary setting, social pressures, healthy relationships, self-defense, and cyber safety.
Grade Level: 7

8

Human Development 8
Eighth grade is a year of increasing autonomy, leadership, and rites of passage. The Human Development curriculum continues to examine physical, emotional, social, and intellectual growth through the lens of students' increasing desire for independence. Students learn about nutrition, environmental responsibility, financial literacy, conflict resolution, boundary setting, cyber safety, and the dangers of drugs and alcohol. Class activities practice the skills necessary for healthy decision-making.
Grade Level: 8