
Middle School

Course of Study



Academic Year 2023-24

2023-24 Middle School Course of Study

Sixth Grade

English A	2
Ancient World History	2
Life Science	2
Mathematics A	2
Mathematics A Laboratory	3
Music 6	3
Physical Education	3
Visual Art 6	3

Seventh Grade

English B	4
Cultures & Societies	4
Earth & Space Science	4
Mathematics B	4
Mathematics B Laboratory	5
Spanish A/B/C	5
Music 7	5
Physical Education	5
Visual Art 7	5

Eighth Grade

English C	6
United States (US) History	6
Physical Science	6
Mathematics C	6
Mathematics C Laboratory	7
Algebra I	7
Spanish A/B/C	7
Health	7
Physical Education	8
Visual Art 8	8

Middle School Electives

Computer Science-Scratch Programming	9
Creative Writing	9
Digital Photography	9
Filmmaking	9
Game Design	9
Instrumental Music	10
Introduction to Animal Science	10
Keyboarding	10
Life Skills	10
Robotics	11
Wellness/Nutrition	11



Sixth Grade

The sixth-grade core curriculum includes four subject areas, English/Language Arts, Social Studies, Science, and Mathematics which are offered daily. The middle school mathematics program includes a weekly sixth-grade math laboratory that allows students an opportunity to connect math concepts through visualization, play, and investigation. Sixth grade courses also include a combination of physical education, art, music, and elective course options to round out the 8-period day.

English A

Students are offered the opportunity to develop a wide range of writing and oral communication skills. Effective writing skills are taught in a writer's workshop model with an emphasis on knowledge and application of the writing process. Additionally, sixth graders hone their ability to listen and express viewpoints by studying and practicing oral communication, thereby gaining respect, and understanding the viewpoints of others. Students are assessed using an assortment of assignments that allow them to express their knowledge via exams, projects, extended responses, and oral communication, both summative and formative.

Ancient World History (6th Grade)

This course introduces and explores the history and development of early civilizations through the Rise of the Roman Empire. The course aims to encourage students to respect and understand the world around them, and to provide a skills base to facilitate further study. This is achieved through the study of individuals, societies, and environments in a wide context: historical, contemporary, geographical, political, social, economic, religious, technological, and cultural topics.

Life Science (6th Grade)

This course focuses on the introduction to the diversity of life found on planet earth. The course includes an overview of scientific principles and procedures and leads students toward a clearer understanding of cells and heredity, biological processes, biodiversity, and ecology. Students will learn about current scientific endeavors and issues, as well as participate in hands-on lab activities. As students refine and expand their understanding of life science, they will apply their knowledge in investigations that require them to ask questions and explore the world around them. Throughout the course, students will also solve problems, reason abstractly, and learn to think critically.

Mathematics A

This course will focus on building a solid foundation of knowledge and skills in algebra. Topics include number systems, ratios and rates, expressions, equations, inequalities, and system of equations. Critical thinking skills include identifying a relationship, comparing terms, formulating, and reasoning about expressions and equations. Communication skills

include making inferences, drawing conclusions, and using mathematical notation correctly. Advancing prior knowledge and adeptness is a major key to excelling in the study of mathematics.

Mathematics Laboratory A

The mathematic laboratory engages students and helps them understand the connections between mathematics concepts through real-world, hands-on exploration. The weekly lab style experience allows students to explore big math concepts at a sixth-grade level through visualization, play, and investigation.

PHYSICAL EDUCATION AND THE ARTS

Music 6

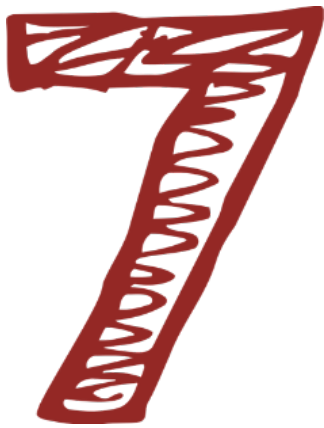
Students will learn fundamental concepts in music theory such as reading and writing music notation, major and minor scales, music intervals, and key music vocabulary terms such as dynamics, tempo, form, melody, meter, and rhythm. Students will begin to explore music history including Renaissance, Classical, Baroque, Modern, and World music history.

Physical Education

Physical education provides students the chance to experience and participate in multiple sports throughout the course of the school year. The course provides students an opportunity to improve and maintain fitness levels. The focus of this course is to provide students the opportunity to compete against their peers, teach sportsmanship, and see the importance of becoming and remaining active throughout their life.

Visual Art 6

Students will be introduced to the elements of art and begin to explore traditional genres such as landscape, still life and portraits. Students will learn how to draw in 2D and 3D perspective. Students will explore various art mediums such as watercolor, oil, papercraft, printmaking, bookmaking, and sculpture to create art. Students will use reflection on a regular basis and be introduced to art criticism to learn about their own art making process.



Seventh Grade

The seventh-grade core curriculum includes five subject areas: English/Language Arts, Social Studies, Science, Spanish, and Mathematics which are offered daily. The middle school mathematics program includes a seventh-grade weekly math laboratory that gives students an opportunity to connect math concepts through visualization, play, and investigation. Seventh-grade courses also include a combination of physical education, art, music, and elective course options to round out the 8-period day.

English B

Course curriculum expands the development of literacy through each of the areas of Language Arts. Variegated literary text instruction promotes decoding, text deconstruction, comprehension strategies, and vocabulary skill building. Students will also engage in informational, persuasive, and narrative writing practice through the writer's workshop. Grammar skills and review will be taught through writing.

Cultures & Societies (7th Grade)

Students explore and examine the nature of various cultures, and the development of cultures across time and place. Students will explore global cultures by analyzing populations, settlement patterns, and how these affect the physical environment. Students also discover how language and beliefs, and the influence of culture has impacted human behavior. The aim of this course is to encourage students to gain and develop knowledge, conceptual understanding, research skills, analytical and interpretive skills, and communication skills, contributing to the development of the student.

Earth & Space Science (7th Grade)

This course develops the students' understanding of Earth and its place in the universe. Students will investigate the properties of and forces in the universe and solar system and analyze techniques scientists use to generate knowledge about them. There is an emphasis on a systems approach, using models of the solar system to explain astronomical and other observations of the cyclic patterns of eclipses, tides, and seasons. The framework of this course encourages students to investigate through research, observation, and experiments, as well as promote both independent and collaborative work.

Mathematics B

This course focuses on building a solid foundation of knowledge and skills in geometry. Topics include angles, lines, triangles, geometric drawing, transformations, perimeter, area, surface area, and volume. Critical thinking skills include evaluating evidence and arguments, drawing reasonable conclusions and generalizations, and considering ideas from multiple perspectives. Creativity and visualization skills are developed to encourage outside-of-the-box thinking needed to construct and deconstruct shapes and ideas.

Mathematics Laboratory B

The mathematics laboratory engages students and helps them understand the connections between mathematics concepts through real-world, hands-on exploration. The weekly lab style experience allows students to explore big math concepts at a seventh-grade level through visualization, play, and investigation.

Spanish A/B/C

Spanish A/B/C is an introductory middle school language acquisition course designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where the language studied is spoken. The course is divided into various personal and social themes, as related to student life, hobbies and interests, and the cultures of various Spanish speaking countries. Students will explore the culture, traditions, and customs in various Spanish-speaking countries around the world. Students will become aware of the value of learning a world language in a multicultural society. Students will be placed at the appropriate course level based on prior knowledge and experience with the Spanish language.

PHYSICAL EDUCATION AND THE ARTS

Music 7

Students will continue to develop their knowledge of music by applying and developing basic music skills as well as be able to identify standard music symbols, pitches, and rhythms. Students will utilize the piano lab to learn and perform music. Students will also continue to investigate various diverse cultures, genres, and distinctive music styles.

Physical Education

Physical education provides students the chance to experience and participate in multiple sports throughout the course of the school year. The course provides students an opportunity to improve and maintain fitness levels. The focus of this course is to provide students the opportunity to compete against their peers, teach sportsmanship, and see the importance of becoming and remaining active throughout their life.

Visual Art 7

Students will continue to review the elements of art and start exploring traditional genres such as landscape, still life, and portraits. Students will learn how to draw in 2D and 3D perspective. Art Mediums such as watercolor, oil, papercraft, printmaking, bookmaking, and sculpture will be explored as ways to create art. Students will regularly use reflection and art criticism to learn about their own art making process.



Eighth Grade

The eighth-grade core curriculum includes five subject areas: English/Language Arts, Social Studies, Science, Spanish, and Mathematics daily. The middle school mathematics program includes a weekly math laboratory that gives students an opportunity to connect eighth-grade math concepts through visualization, play, and investigation. Eighth-grade courses also include a combination of physical education, art, health, and elective course options to round out the 8-period day.

English C

This course emphasizes the acquisition and refinement of skills necessary for students to express their ideas effectively to adequately prepare students for upper school. Students are encouraged to find meaning and value in the words and thoughts of others. Participation in this class allows students to see the power of language. A variety of methodologies and materials are used, including rich literature and contemporary articles, varied project-based learning experiences, guest speakers, group discussions, peer reflection and teaching, student-centered inquiry, journaling, self-reflection, and debates. Formative and summative evaluations.

United States (US) History (8th Grade)

This course will focus on US History from the steps leading to the Revolutionary War to 1877. The aim of this course is to encourage students to gain and develop knowledge, conceptual understanding, research skills, analytical and interpretive skills, and communication skills, contributing to the development of the student. The course aims to encourage students to respect and understand the world around them, and to provide a skills base to facilitate further study. This is achieved through the study of individuals, societies, and environments in a wide context: historical, contemporary, geographical, political, social, economic, religious, technological, and cultural topics.

Physical Science (8th Grade)

The framework of this course encourages students to investigate through research, observation, and experiments, working independently and collaboratively. Topics covered include the introduction to matter, solids, liquids, and gases, energy, thermal energy, waves and electromagnetic radiation, electricity and magnetism, information technologies, atoms and the Periodic Table, chemical reactions, forces and motion, and other selected topics. Students will also review the history of planet earth/earth systems, and space systems.

Mathematics C

This course will focus on building a solid foundation of knowledge and skills in coordinate geometry and statistics and probability. Topics include points, lines, functions, and the distance and area in a coordinate plane. Critical thinking skills include modeling an association in data with a linear equation, solving linear equations, identifying variables, data collection, data representation, and data analysis. Communication skills include

making inferences and drawing conclusions, reading, and writing and using language to gather and communicate information as it applies to the real world.

Mathematics Laboratory C

The mathematics laboratory engages students and helps them understand the connections between mathematics concepts through real-world, hands-on exploration. The weekly lab style experience allows students to explore big math concepts at an eighth-grade level through visualization, play, and investigation.

Algebra I

**Prerequisite: Department recommendation required*

Students may be recommended to take advance mathematics course work, Algebra I, a ninth-grade level course, during their eighth-grade year. This course will be focused on basic algebra topics. Students will learn to work with polynomials, linear and quadratic equations, and inequalities in a variety of ways including simplifying, factoring, solving, and modeling everyday problems. Students will also work with rational, radical, and exponential equations. This course will also cover knowledge and skills in working with 2D and 3D geometric shapes.

Spanish A/B/C

Spanish A/B/C is an introductory middle school language acquisition course designed to provide students with the necessary skills and intercultural understanding to enable them to communicate successfully in an environment where the language studied is spoken. The course is divided into various personal and social themes, as related to student life, hobbies and interests, and the cultures of various Spanish speaking countries. Life in various Spanish-speaking countries will be examined. The students will become aware of the value of learning a world language in a multicultural society. Students will be placed at the appropriate course level based on prior knowledge and experience with the Spanish language.

PHYSICAL EDUCATION AND THE ARTS

Health (8th Grade)

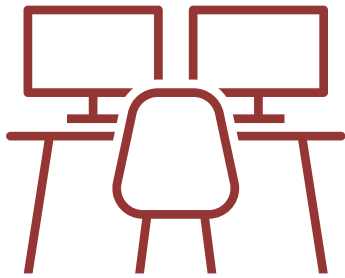
This course educates students about healthy choices and teaches them how to put those choices into practice in their daily lives. By the end of this course, students will be able to explain concepts related to health promotion, and how to care for themselves through healthy diets and understanding of the nutrients and necessary foods for growth. Students will also understand outside elements that affect their personal health and wellness to include social pressures, media, and the effects of their personal choices.

Physical Education

Physical education provides students the chance to experience and participate in multiple sports throughout the course of the school year. The course provides students an opportunity to improve and maintain fitness levels. The focus of this course is to provide students the opportunity to compete against their peers, teach sportsmanship, and see the importance of becoming and remaining active throughout their life.

Visual Art 8

Students will learn Design Principles as they are introduced to new forms of art such as papercraft, ceramics, and basic digital art. Students will produce art that is expressive to themselves. In this course students will continue to use art criticism to learn about their own art making process.



Electives

Middle School students may enroll in various elective courses each year. Students are encouraged to explore and learn topics of their personal interest through enrollment in elective courses. Some elective courses are grade specific, while others are based on student preference and may include students in grades sixth through eighth.

Computer Science-Scratch Programming

This course introduces students to the fundamentals of programming by combining coding with art and design for unlimited fun with creating multimedia stories, animations and games using the MIT App Inventor's visual drag and drop programming interface. Students will get creative with designing their own characters, backdrops, recording sound, adding special effects to bring their ideas to life. The course unlocks creativity while teaching computational concepts of motion and sequencing, loops, events and parallelism, operators, variables, modularity and more. No prior coding experience is required to participate in this course.

Creative Writing

Creative writing shares elements with English and literature classes in focused and searching discussions of iconic texts. Many class sessions will function as participatory writing workshops for young poets and storytellers. Exploring the elements of good storytelling and the mechanics of good narrative fiction, students will write, brainstorm ideas collaboratively, and craft individual stories based on writing assignments. The course culminates in a final writing project where students write and illustrate their own children's book.

Digital Photography

Students will learn how to take well composed photographs using digital cameras and/or smartphones. Students will explore compositional guidelines, including the rule of thirds, symmetry, high and low angles, how to create texture and pattern, and using color. Students will gain hands-on experience taking pictures, using digital filters, and learning how to edit pictures. Students will be introduced to different types of photography, such as, outdoor, portrait, still-life, or photojournalism photography.

Filmmaking

Students will be introduced and begin to understand the concept of film as a medium of expression. This class provides a foundation for students who are interested in taking advanced film courses in the upper school. Students will explore how the film industry works around the world, understand the process of film critique, expose themselves to various new film genres, learn the history of film, and be a part of a filmmaking process.

Students will be exposed to the basics of film editing and production with the goal of creating a full film by the end of the year.

Game Design

Students in this course will discover what it takes to become a software developer by learning how to design video games. Students describe games using standard terminology learned early in class. Students outline the rules and procedures before they construct prototype versions of their original games. Students act not only as creators, but also as analysts as they investigate each other's work and recommend improvements. Through these activities, students learn the process of iterative design: imagine, create, evaluate, and refine. By the end of the year, students choose a programming language to delve into more deeply and develop an original piece of software using that language. They also acquire skills in all the various fields involved in the production of a video game including system development, plot writing, sound editing, digital image creation/manipulation, coding, character design, world design, and more!

Instrumental Music

In this class students will explore instrumental music through a chosen instrument. Students will have a choice of continuing the instrument that they have been learning or starting a new one. (Students interested in instrumental music should receive prior approval from the music department). Students will focus on playing ensemble and small group pieces with performances quarterly for the school or their class.

Introduction to Animal Science

This course introduces students to both small and large breed animals in a variety of settings. Topics will include animal anatomy, physiology, behavior, nutrition, reproduction, health, and basic care. Students will learn about livestock, zoo animals, and companion pets. Additional topics will include a focus on Equine care at Springdale's sister stable – Talbot Run with additional hands-on experience. Students will explore careers in animal science and discuss animal welfare/rights. Students will participate in local field trips and experience hand-on learning opportunities. The course culminates in a research project based on a species of the student's choice.

Keyboarding

Keyboarding is designed to provide an opportunity to learn to touch type on the computer keyboard using correct techniques as well as the development of speed and accuracy. Students will be introduced to the formatting of personal and business letters, notes, memos, and emails.

Life Skills

Life Skills promotes the physical, social, and emotional development of students through a holistic balanced approach to the curriculum. Students will engage in active learning, collaborative activities that foster self and social awareness, and practice decision-making skills and responsible behavior. This course promotes positive peer relations, effective executive function skills (i.e., planning, organization, self-motivation), and collaborative

skills for group work. Topics include, basic concepts of money management, food planning/storage, time management/scheduling, and more!

Robotics

This is a hands-on laboratory course involving the physical construction, electronic wiring, and computer programming of robots. Students will, both individually and in groups, be responsible for constructing their own individual robots. Where possible, these robots will be evaluated on students' lab completion and reflection process, and where appropriate through timed and agility robotics competitions. This is an introductory class, targeted towards middle school students. Students should welcome and not fear our new robot overlords!

Wellness & Nutrition

This course provides students with an overview of good nutrition principles to support physical and mental wellbeing and a healthy lifestyle. Topics include basic nutrition, weight management, digestion, and life span nutrition. Students learn how to interpret & analyze nutrition labels and explore nutritional properties of foods. This course also introduces students to government food safety regulations and explores how food and agricultural technologies influence food production, such as genetic modification, preservation, and food waste management.