Middle School Course Offerings & Descriptions

Arches Academy
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Administration

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Mission Statement

Accreditation
Arches Academy is accredited through AdvancEd.

All information in this booklet is subject to change
(Including class fees, credit given, and classes offered)

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Course Descriptions

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SOCIAL STUDIES **15**
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GC - Student Government Elective
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US - US History
WC - World Civ.

Arches Academy 9th Grade Required Credits to Transfer

Code	Credit	Class Title
SC1 SC2	1	Science – Biology Core Science – Environmental Earth Science
MC	1	Secondary Math 1 (Singapore Level 8/9)
EO9	1	English 9
PES	.5	PE Skills
A	.5	Fine Arts
CS	.5	Computer Tech
CSP	.5	Computer Science Principles
WC	.5	World Civ.
G	.5	World Geography
	1	Additional elective credit is required for graduation
Total	7	Total credits required to transfer for graduation

Grading Scale

Letter Grade	Numerical Value	Percentage
A	4.0	94%-100%
A-	3.7	90%-93%
B+	3.4	87%-89%
B	3.0	84%-86%
B-	2.7	80%-83%
C+	2.4	77%-79%
C	2.0	74%-76%
C-	1.7	70%-73%
D+	1.4	67%-69%
D	1.0	64%-66%
D-	.7	60%-63%
F	0	0%-59%

Arches Academy 9th Grade Curriculum

Required Core Credits				
Code	**Credit**	**Quarter Graded**	**Class Title**	**Year Offered**
SC1	1	1 - 4	Science – Biology Core	A
SC2	1	1 - 4	Science – Environmental Earth Science	B
MC	1	1 - 4	Secondary Math 1 (Singapore Level 8/9) [or Math Level 6, 7, or 8]	A/B
EO9	1	1 - 4	English 9	A/B
PES	1	1 – 4	PE Skills	A/B
A	.5	1, 2	Fine Arts – Music or Visual Arts	A/B
CS	.5	1, 2	Computer Tech	A/B
CSP	.5	3, 4	Computer Science Principles	A/B
WC	.5	1, 2	World Civ.	A
G	.5	3, 4	World Geography	A
US	1	1-4	US History	B
TOTAL	6.5 Possible Core Credits			
Elective Credits				
EL	1	1 – 4	Foreign Language – French, Spanish, German, ESL	A/B
A	.5	3, 4	Fine Arts Elective - Drama or Visual Arts	A/B
Not required			Seminary – Not included as release time at Arches Academy	
	1.5 Possible Elective Credits			
TOTAL	8 Total Possible Credits			

MASTER LIST:

Required Core Credits				
Code	**Credit**	**Quarter Graded**	**Class Title**	**Year Offered**
SC1	1	1 - 4	Science – Biology Core	A
SC2	1	1 - 4	Science – Environmental Earth Science	B
MC	1	1 - 4	Secondary Math 1 (Singapore Level 8/9) [or Math Level 6, 7, or 8]	A/B
EO9	1	1 - 4	English 9	A/B
PES	1	1 – 4	PE Skills	A/B
A	.5	1, 2	Fine Arts – Music or Visual Arts	A/B
CS	.5	3, 4	Computer Tech	A/B
CSP	.5	3, 4	Computer Science Principles	A/B
WC	.5	1, 2	World Civ.	A
G	.5	3, 4	World Geography	A
US	1	1-4	US History	B
TOTAL	6.5 Possible Core Credits			

Elective Credits				
EL	1	1 – 4	Foreign Language – French, Spanish, German, ESL	A/B
A	.5	3, 4	Fine Arts Elective - Drama or Visual Arts	A/B
ASC	.5	1, 2	Applied Science- STEM (MC Elective)	A
CTE	.5	1, 2	Communications: Principles of Leadership / (MC Elective)	B
CTE	.5	1, 2	Communications: Social Media Marketing / (FL Elective)	A
GC	.5	1, 2	Government & Citizenship OR MC Elective	A/B
PA	.5	1, 2	Practical Arts Elective- Business (FL Elective)	B
Not required			Seminary – Not included as release time at Arches Academy	
	3 Possible Elective Credits			
TOTAL	9 Total Possible Credits			

Course Descriptions
ART--VISUAL

A - Fine Arts - Art Foundations I

0.5 credits
Semester
This course is designed to give an overview of and introduction to visual arts by studying the elements of art, different art mediums and techniques. With an emphasis on color, shape, space and texture, students will observe works of art and produce their own using a variety of art tools and materials. They will focus on a wide range of subject matter including portraits, perspective, the natural world and imagination.

A - Fine Arts Elective - Art Foundations II: Painting and Drawing

0.5 credits
Semester
This course includes the fundamentals of drawing as well as the use of wet media and color. Drawing focuses on using the elements of art and composition to create artworks with pencil, ink and charcoal. Painting covers the use of watercolors and acrylics, along with the process and application of color. Students produce works using a variety of subject matter including portraits, still life, and abstract.

ART--PERFORMING

A - Fine Arts Elective - Drama (Performance) (Musical Theater)

0.5 credits
Semester
$15 class fee
This course is designed for those students who have an interest in performing. In this quarter the students will prepare for the spring musical by learning song and dance and memorizing lines. They will be introduced to the effective use of voice, body, and emotion. They will learn to develop characters and they will improve in their confidence and abilities to perform. By the time they perform the school musical the students will have a solid grasp on stage presence, theater cues, and other technical aspects of theater. Participation in the school musical is required.

A - Fine Arts Elective - Theatre Production (Backstage Crew) (Stage Craft)

0.5 credits
Semester
Students will learn the basics of technical theater. They will be given specific roles as they learn the practical aspects of the following:

- Costumes
- Make-up
- Lighting

- Set Design (building and painting)
- Sound
- Lighting
- Props
- House Management
- Stage Management

This is a labor-intensive class. Students will do lots of hands on work as we prepare for the spring musical. This class will be responsible for building and painting a set, creating props, preparing costumes, ensuring we will have proper sound and lighting, and being aware of all tech cues during the performance of the show. Participation in the school musical is required.

A - Fine Arts - Music [Intro to Music - (FA)]

0.5 credits
Semester

In this class, students will learn the fundamentals of music theory and choir performance. They will learn sol fege techniques to help with ear training and pitch. They will learn about the lives of famous composers and listen to different styles of classical music. Students in this class will have the opportunity to perform in various choral performances throughout the year, including Grandparents Day, the Christmas Concert, and the Gala.

CAREER TECHNOLOGY
Business Education

CTE – Communications: Principles of Leadership (Leadership Principles)

0.5 credits
Semester

This introductory course will teach students to communicate in a clear, courteous, concise, and correct manner on both personal and professional levels. Competency will be developed in oral, written, interpersonal, technological, and employment. Listening skills will be incorporated throughout the semester. The overriding goal is to provide students with a solid communication base so they are able to communicate effectively. Students will develop effective communication skills, problem -solving and decision-making in numerous types of situations using a variety of media. Work ethics and social responsibilities will also be introduced. They will also do international research, debate, current events, and persuasion techniques.

CTE – Communications: Social Media Marketing

0.5 credits
Semester

This course will introduce students to the fundamentals of digital and social media marketing. Students will learn tools and skills necessary for creating, developing, and implementing digital marketing campaigns. Competency will be developed in written and technological communications as well as creative and business problem solving and decision making skills using digital and social media. In this course students will gain practical experience in Media Planning, Branding, Display Advertising, Social Media Digital Campaigns, Mobile Media, Marketing Budgets, Marketing Career Paths, etc.

CTE - College & Career Awareness / Leadership

0.5 credits
Semester
The Career Development Applications include lesson plans designed to support self-discovery (aspects of self relevant to college and career planning), exploration of postsecondary education and career options, and the development of an individual College and Career Ready Plan that is informed by that self-discovery and exploration. The broad goal is to help students begin to "figure out who they are while they decide what they want to become." (Source: U.S. Department of Labor - Finding One's Way: Career Guidance for Disadvantaged Youth.)

PA - Practical Arts Elective - Business (Business Management (CTE)

0.5 credits
Semester
The Business Management course provides students with an understanding of the business management functions, various management theories and the basic organization of a business. Students learn that Business Management is the process of using the resources of a business to efficiently and effectively achieve its goals through planning, organizing, staffing, leading and controlling.

CS - Computer Tech (CT, CTE)

0.5 credits
Semester
This course presents basic computer concepts and hands-on training in using a PC operating system, web browsers, e-mail software, and office application suite software. Students will be exposed to basic terminology of computer hardware and software. Topics covered include: basic computer operating system software commands for efficient computer utilization, use of Internet browsers to locate information for professional and personal use, e-mail basics and etiquette, commands needed to create, edit, enhance, save, print, and use effectively word processing documents, spreadsheets, databases, and presentation slide shows. Students also gain an understanding of network fundamentals and demonstrate skills for digital citizenship and how to responsibly interact on the internet. Students who are ahead will also be trained in the Python program.

CSP - Computer Science Principles (CTE)

0.5 credits
Semester
Computer Science Principles covers many topics including the Internet, Big Data and Privacy, and Programming and Algorithms. The curriculum introduces students to the foundational concepts of computer science and challenges them to explore how computing and technology can impact the world. More than a traditional introduction to programming, it is a rigorous, engaging, and approachable course that explores many of the foundational ideas of computing so all students understand how these concepts are transforming the world we live in.

ENGLISH

E - English 9 (E09)

1 credit
Full year
In English 9 students will delve into deep analysis. The course will focus on literature, informational texts, and the development of academic writing skills. Students will engage in a variety of tasks all designated to improve their reasoning and analytical abilities.

FOREIGN LANGUAGE

EL - Foreign Language - French (Beginning & Advanced) (French 1 & French 2)

1 credit
Full year

French 1 (Beginning):

Students will learn to state facts and exchange information. They will be able to comprehend and respond to written communication. In speaking and writing, they can narrate, describe, and explain in the present. They can describe characteristics and behaviors of everyday life in French culture and they can understand a variety of perspectives.

French 2 (Advanced):

Students will learn to state and support opinions as well as exchange information. They will be able to comprehend and respond to written communication. In speaking and writing, they can narrate, describe, and explain in past, present, and future. They can describe characteristics and behaviors of everyday life in French culture and they can understand a variety of perspectives.

EL - Foreign Language - Spanish (Beginning & Advanced) (Spanish 1 & Spanish 2)

1 credit
Full year

Spanish 1 (Beginning):

Students begin to communicate sufficiently to satisfy basic survival needs and minimum courtesy requirements. They can ask and answer some simple questions, respond to and sometimes initiate short statements and maintain simple conversation. Students participate in memorized skits and also write their own with relevant vocabulary. Students understand and interpret written language in a variety of topics, as well as create their own writing at a basic level. Students will participate in activities which expose them to some aspects of Spanish culture.

Spanish 2 (Advanced):

Students develop further communication skills and are able to satisfy most survival needs and limited social demands. They can initiate and sustain a short conversation on factual topics. They can give

autobiographical information and discuss leisure time activities. Students are able to present information and ideas to an audience. They are becoming more familiar with grammar concepts, especially the many forms taken by verbs and other advanced topics such as direct and indirect object markers. They also participate in activities, which expose them to aspects of Spanish culture.

EL - Foreign Language - ESL (English Second Language Study Skills)

1 credit
Full year
Students learning English will focus on reading, writing, listening, and speaking (conversation and pronunciation) skills. They will do this through worksheets, games, and personally tailored lessons. Two or three exams over the course of the year will test them through personal practice. The students will also practice skills through homework and several class projects. Because of the nature of the class, student lessons will vary between one-on-one lessons and group lessons. Progress and final comprehension will depend on the student's initial comprehension of the English language.

MATHEMATICS

MC - Math Level 6

1 credit
Full year
Students will learn the following aspects of math:
Algebra: An overview of basic algebra including algebraic expressions, equations, and graphing functions.
Fractions and Decimals: Writing a decimal as a fraction. Writing a fraction as a decimal. Represent positive and negative fractions on a vertical number line. Represent positive and negative decimals on a horizontal or vertical number line. Compare positive and negative fractions. Compare positive and negative fractions and decimals. Be able to use the four main operations (add, subtract, multiply, divide) with fractions.

- Percentage: Percentage of a Quantity. Percentage Change. Interest, Sales Tax and Discounts.
- Ratio and Proportion: Compare 2 or 3 quantities. Solve Word Problems. Proportions
- Rate and Speed: Learn how to calculate rates and speeds given different quantities. Calculate and understand average speed.
- Circles: Radius, diameter, and circumference. Area of a circle
- Volume of prisms and cylinders
- Angles: Adjacent Angles. Vertically Opposite Angles and Angles at a Point. Complementary Angles. Supplementary Angles. Angles and Polygons
- Construction of triangles and quadrilaterals
- Data handling: Mean. Population and Sample (Be able to decide if a survey can use the population or needs a sample. Types of sampling: Median, Mode, Range
- Probability: Experimental Probability. Theoretical Probability of Simple Events. Theoretical Probability of Combined Events

- Negative Numbers: Addition and Subtraction. Multiplication and Division. Order of Operations. Solving Equations. Graphs of Functions

Textbook: Primary Mathematics 6A & 6B, Standards Edition.
ISBN: 978-0761427582

MC - Math Level 7

1 credit
Full year
This course introduces students to the foundations of algebra and geometry. Topics include: rewriting or comparing expressions, analyzing geometric figures, linear equations, and an introduction to statistics and probability. Students will expand their knowledge of fractions to solve problems with ratios, percentage, and proportions. Performing operations now include integers and decimals, allowing them to solve more complicated problems. Students will learn strategies to solve real-world problems by translating word problems in algebraic expressions.

Textbook: *discovering MATHEMATICS 7A, a Singapore Math Program.*
ISBN 978-981-4250-52-8

MC - Math Level 8

1 credit
Full year
This course integrates pre-algebra, algebra, and geometry and includes some trigonometry and advanced math topics including:

- Exponents and Scientific Notation
- Linear Equations in Two Variables
- Expansion and Factorization of Algebraic Expressions
- Quadratic Factorization and Equations
- Simple Algebraic Fractions
- Congruence and Similarity
- Parallel Lines and Angles in Triangles and Polygons
- Graphs of Linear and Quadratic Functions
- Graphs in Practical Situations
- Pythagorean Theorem
- Coordinate Geometry
- Mensuration of Pyramids, Cylinders, Cones and Spheres
- Data Analysis

An exercise for each lesson including questions in the following sequence:

- Basic Practice (simple questions involving a direct application of the concepts)
- Further Practice (more challenging questions on direct application)

Textbook: Dimensions Math 8A & 8B, *Common Core*. Singapore Math series
ISBN: 9789814250627

MC - Secondary Math I (MC, AMC, EM)

1 credit
Full year
This course builds upon the concepts learned in a beginning algebra course and prepares students for advanced-level math courses. Students extend their knowledge and understanding by solving open-ended questions and thinking critically. Topics revisited from previous math courses include: functions and their graphs, quadratic functions, and polynomial functions. Students are introduced to rational, radical, and logarithmic functions; sequences and series, conic sections and matrices. While this course does not require a graphing calculator, the purchase of a calculator equivalent to the TI-84 is highly recommended during the latter part of the course.

Textbook: McDougal and Littell, *Algebra 2,* Copyright @ 2007.

PHYSICAL EDUCATION & HEALTH

H - Health

0.5 credits
Semester
The primary goal of Utah's Health Education Core Curriculum is to develop the knowledge, skills, and behaviors essential to become "health-literate." A health-literate person understands the medically accurate principles of health promotion, and disease prevention and is able to apply the knowledge to personal attitudes and behaviors that support healthy living. A health-literate person is able to:

- Access valid health information and health-promoting products and services.
- Analyze the influence of culture, media, technology, and environment on health.
- Develop understanding and respect for self and others.
- Practice goal-setting, decision-making, and self-management skills to enhance health.
- Practice health-enhancing and risk-reducing behaviors.
- Use interpersonal communication skills to improve health and relationships.
- Advocate for personal, family and community health.

PES - PE Skills (Lifetime Activities)

1 credit
Full year
In this course, students will participate in physical activities that allow them to develop an understanding of the physical abilities of themselves and others. Students become aware of the social benefits of physical activity through participation. The total development of students is the goal of the educational system, and this class is a vital part of reaching this goal. A variety of activities are incorporated into this class, varying from creative movement to lifetime sports. The age level of the individuals is a factor determining which activity is provided, but the outcome at any level is the same.

SCIENCE

ASC - Applied Science - STEM 1 & STEM 2

0.5 credits
Semester
This course is a hands-on laboratory course where students will experiment with the application of science and technology. Students choose from several options including applied chemistry, electric circuits, and mechanical motors. Students learn basic principles and then design and conduct their own experiments. This will give students direct experience with topics such as mechanical forces, chemical properties, hydraulics, electricity, and heat.

SC1 - Science - Biology Core (SC1, ASC)

1 credit
Full year
This course explores the basics of biology. Students will learn about the balance of water and energy in an ecosystem, and will understand biotic and abiotic factors that influence an ecosystem's balance. Students will learn about the basic building blocks of biology, including DNA, RNA, and protein, with an emphasis on the central dogma of biology. Finally, we will learn about human physiology. This includes a survey of the 11 major organ systems.

The overall course emphasis will be on scientific thinking and experimental understanding. While there will still be board work and worksheets, students will do most of their learning through hands on interaction with the principles of science.

SC2 - Science - Environmental / Earth Science (SC2, ASC, CTE)

1 credit
Full year
This course covers the basics of environmental science. Students will learn about the formation of the Earth from pre-existing materials, and will compare the Earth to other objects in the solar system. We will then explore the internal and external structure of the earth, learning about the liquid core and mantle, plate tectonics, and continental drift. The students will learn about the atmosphere and its interaction with the hydrologic cycle. Finally, students will learn about the impact of environmental science on society, with an emphasis on current issues. We will read and understand current research papers.

The overall course emphasis will be on scientific thinking and experimental understanding. While there will still be board work and worksheets, students will do most of their learning through hands on interaction with the principles of science.

SOCIAL STUDIES

GC - Government and Citizenship Elective

0.5 credits
Semester
In this course, students will understand the significance and impact of the Constitution on everyday life. They will learn the protections and privileges of individuals and groups in the United States. Students will be taught the distribution of power among the national, state, and local governments in the United States federal system, or compound constitutional republic. This class will cover the responsibilities of citizens in the United States. Students will learn basic economic principles and how they influence everyday life. Finally, students will discuss the relationship between the United States and the international system.

GC - Student Government Elective

1 credit
Full year
This class provides elected officials the opportunity to learn how to operate student school governments. Students who hold office will have the chance to preside over and participate in meetings. Learning and practicing principles of leadership, the students will plan, organize and execute school wide service projects, celebrations, and events.

G - World Geography

0.5 credits
Semester
This course offers students the opportunity to understand the world on a physical level. Students will learn about the world's various climates, eco-systems, resources and more. Students will gain the ability to read and create different mapping systems. Using that core knowledge, each continent will be examined and studied, making connections between the physical geography to the residents' culture and political systems.

US - US History

1 credit
Full year
In this course students will interpret the role of geography in shaping United States history and investigate the relationship between events of different time periods. They will understand the changes caused by European exploration in the Americas and they will analyze European colonization and settlement of North America. Throughout the course, students will understand the significance of the American Revolution in the development of the United States. They will understand the structure and function of the United States government established by the Constitution. Students will learn the effects of the Civil War by exploring the territorial growth and expansion of the political system and social rights in the United States before the war. They will understand the significance of the Civil War Era to the United States and the development of the American West following the war.

WC - World Civ.

Semester
2 quarters

This course fosters informed, responsible participation in public life, which is essential to the preservation and improvement of democracy both within the United States and throughout the world. Students will be taught the major ideas, protections, privileges, structures, and economic systems that affect the life of citizens around the earth. Students will gain a global perspective as they study the cultures, religions, opinions, and political systems of the world's countries.