

Course Descriptions for Mighty Roots Academy Programs



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Mighty Roots Academy

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Mailing address: 12616 Blue Ridge Ext., Grandview, MO 64030

Program meets at: The Wedding Place 3600 Blue Ridge Blvd., Grandview, MO 64030

Homeschool Academy

Course Descriptions

Homeschool Academy: 9:35-11:35 Block

Creative Explorations

Ages: 5 - 7

Students will explore the world around them guided by their interests. Each interest area will typically be explored for a few weeks through readings and then hands-on exploration in centers that encompass and draw on building basic skills through math, science, nature, language, play, and art, with an emphasis on developing fine motor skills. Students will also engage in ongoing projects, such as journaling, that demonstrate yearly growth and progress. Students will focus on literacy through read-alouds, shared reading, learning the alphabet and practicing handwriting.

Homeschool Academy: 9:35-10:35 Block

Read, Write and Draw

Ages: 6 - 10

Students will explore reading, reading comprehension, language arts, spelling, and a love for storytelling in this fun and creative class. Young learners will get to work on their reading skills while being inspired to create their own stories.

Reading level: Developing readers who are not yet able to read stories independently.

EPIC Art

Ages: 8 - 12

In this hands-on, engaging art course for the upper elementary group, students will learn about the Elements of Art and the Principles of Design and how to use them in their artwork. Students will dive in deep to create works with greater detail and expression. Students will explore a variety of media (paints, oil pastels, chalk pastels, markers, collage, clay and sculpture, etc.). Students will use literature and science connections, artist study, as well as both guided and observation drawing to explore line and pattern, shape, color, value, space, texture, form, movement and rhythm, balance, contrast and emphasis, repetition, and unity.

\$20 materials fee

Mad Scientist: Intro to Chemistry

Ages: 9 - 15

Grow, glow and explode in this introductory to Chemistry course through hands-on experiments. Students will learn about elements and reactions as well as about some real life “mad” scientists!

Mighty Roots Academy

Class Offerings 2022-2023

Homeschool Academy: 9:35-10:35 Block (continued)

Psychology

Ages: 12 - 15

Students will participate in an introduction to the scientific study of behavior and mental processes through the exploration of major theories, concepts, methods, and research findings in the field of psychology. Using the foundation of the scientific method, topics cover various sub-disciplines in psychology: biological, cognitive, developmental, social and personality, and mental/physical health.

****\$100 CLEP Prep fee if choosing to take this class in order to prepare for the CLEP exam. Students must purchase the CLEP exam separately.***

*Students may also take this course as part of our College Prep Study Courses.

-Students will be provided with at-home study materials to help prepare them to take the CLEP Introductory Psychology exam.

-Students will participate in monthly Exam Preparation sessions with Mighty Roots Learning Guides before or after the Academy day for additional instruction.

-Students must provide their own CLEP study guide (\$15-40 depending on the course and book condition or borrow from the library).

-CLEP exams are scheduled and paid for by the individual family (Exam \$89 + Testing Center Fee \$25-35).

Homeschool Academy: 10:35-11:35 Block

EPIC Art Jr.

Ages: 5 - 8

In this hands-on, engaging art course, students will learn about the Elements of Art and the Principles of Design and how to use them in their artwork. Younger students will focus on developing fine motor skills and exploring a variety of media (paints, oil pastels, chalk pastels, markers, collage, clay and sculpture, etc.). Students will use literature connections, artist study, and guided drawing to explore line and pattern, shape, color, value, space, texture, form, movement and rhythm, balance, contrast and emphasis, repetition, and unity.

\$20 materials fee

My State: Exploring MO/KS

Ages: 8 - 12

This social studies-based course will explore the government, geography, history, people and places of interest pertaining to Missouri and Kansas. Students will create an interactive My State Portfolio as they dive into the past, examine the present, and plan for the future.

Mighty Roots Academy

Class Offerings 2022-2023

Homeschool Academy: 10:35-11:35 Block (continued)

Lunch and Discovery Play

Ages: 9 - 15

Students will eat their lunch brought from home, and have the remainder of the class to play. MRA wants to increase the average 12 minutes per day that an American child spends outside in nature! Unhindered imaginative play, while supervised (but not interrupted) by an adult, is the true work of childhood. Students receive the opportunity to enjoy our beautiful outdoor acreage however they choose. Pickup sports games, pretend adventures, exploring the grounds, or laying in the grass enjoying the sunshine.

Note: Students will go outside daily and should be dressed in weather appropriate clothing. Bring a daily change of clothes in case they are needed. Severe weather alerts will prevent outdoor play but rain, snow, and wind will not.

Homeschool Academy: 11:35-12:35 Block

Lunch and Discovery Play

Ages: 5 - 12

Students will eat their lunch brought from home, and have the remainder of the class to play. MRA wants to increase the average 12 minutes per day that an American child spends outside in nature! Unhindered imaginative play, while supervised (but not interrupted) by an adult, is the true work of childhood. Students receive the opportunity to enjoy our beautiful outdoor acreage however they choose. Pickup sports games, pretend adventures, exploring the grounds, or laying in the grass enjoying the sunshine.

Note: Students will go outside daily and should be dressed in weather appropriate clothing. Bring a daily change of clothes in case they are needed. Severe weather alerts will prevent outdoor play but rain, snow, and wind will not.

Financial Journey

Ages: 9 - 15

Students will approach financial literacy in a real-world way! The financial journey in this course will begin as students role play being members of a simulated town. The members will be challenged with scarcity, opportunity costs and resource allocations in the community. As individuals in the town, students will learn about personal finance based on our "earnings". Students will learn what saving and investing look like, as well as budgeting for needs vs wants.

Mighty Roots Academy

Class Offerings 2022-2023

Homeschool Academy: 11:35-12:35 Block (continued)

U.S. History To 1877

Ages: 12 – 15

This history class will take students from the geo-politics of the beginning of the American Civil War through the nation's reconstruction. Students will learn the facts and dates while utilizing hands-on, living history projects. By reading applicable books written during the time and discussing power, politics, war, and justice, students will learn why studying history is important and maybe even be inspired to be a part of a better future.

****\$100 CLEP Prep fee if choosing to take this class in order to prepare for the CLEP exam. Students must purchase the CLEP exam separately.***

*Students may also take this course as part of our College Prep Study Courses.

-Students will be provided with at-home study materials to help prepare them to take the CLEP History of the United States I: Early Colonization to 1877 exam and participate in monthly Exam Preparation sessions with Mighty Roots Learning Guides.

-Students will participate in monthly Exam Preparation sessions with Mighty Roots Learning Guides before or after the Academy day for additional instruction.

-Students must provide their own CLEP study guide (\$15-40 depending on the course and book condition or borrow from the library).

-CLEP exams are scheduled and paid for by the individual family (Exam \$89 + Testing Center Fee \$25-35).

Homeschool Academy: 12:35-1:35 Block

Sensory Science

Ages: 5 - 8

Students will discover the world around them and create experiments that stimulate their senses! Through hands on experiments, interesting books, lab notebooks, and other activities students will delve into the world of science. Students will discover complexity, order, and wonder.

Animal Science

Ages: 6 - 10

Every animal has something unique about it. Together students will learn all about animals and their habitats. Students will also learn about what it takes to care for animals, from the pets in our homes to the ones we see at the zoo, on a farm, or in nature - plus the amazing people behind it all!

Mighty Roots Academy

Class Offerings 2022-2023

Homeschool Academy: 12:35-1:35 Block

Literature Adventures

Ages: 8 – 12

Reading quality literature that inspires and enlightens us remains the absolute best way to engage students and create a lifelong love of reading. In this course, students will listen to read-alouds, write excerpts, create characters and discuss plot points. Home reading assignments will be necessary. Each class time will have some grammar/language arts instruction. Experience a new type of book club!

Reading level: Independent readers of chapter books.

Additional Materials: Students provide their own copy of each book. Most are available through the library.

Math Sr.

Ages: 10 – 15

Bring math to life through challenging games and activities in combination with Teaching Textbooks. Students will problem-solve practically, through active learning, and with friends of different ages and interests. Multi-leveled activities will meet each student at their math level while challenging them to master new math skills in fun ways. Target skill range 7-10th grade. Students should have a minimum mastery of long division, adding and subtracting fractions, order of operations, and solving for missing information.

Additional Materials: Family provides appropriate level of Teaching Textbooks for your student to use in conjunction with this class and at home.

Advanced EPIC Art

Ages: 12 – 15

The Elements of Art and Principles of Design are the building blocks used to create a work of art. They are line, pattern, shape, value, color, space, texture, balance, contrast, repetition, emphasis, and unity. Middle and High School students will explore these concepts and how to use them in their artwork. They will be challenged to stretch their imagination to create works of their own design, while working within the guidelines of our topic and medium. Students will explore a variety of media, including pencil, ink, paint, oil pastel, chalk pastels, markers, collage, and sculpture. This course may include artist study, connections to science and math, and observation drawing.

\$20 materials fee

Mighty Roots Academy

Class Offerings 2022-2023

Homeschool Academy: 1:35-2:35 Block

Math and Literacy Games

Ages: 5 – 8

Students will have a fun time while learning math and reading! Throughout the year students will play different board games, card games, and kinesthetic games that focus on math and literacy skills. This course will also provide a fun team-building element as well to make sure each student's needs are met academically.

World of Plants

Ages: 6 – 10

Students will get their hands dirty in this course as they explore what it means to be a gardener and botanist! Not only will students help plant a fall and spring garden, but will also make science connections: learn about soil biology, worms, bugs/bugs/bugs (the good guys and the bad guys) and what to do about them! We will dig into how compost works, and do math as we learn how to plan a garden and how much space each plant needs. While the garden slumbers in winter, the class will plan, explore different ways to start seeds, and learn how to cook, ferment, and/or preserve what we grow.

Math Games Middle

Ages: 8 – 13

Students will bring math off the page and to life through challenging games and activities. Students will problem-solve practically, through active learning, and with friends of different ages and interests. Multi-leveled activities will meet each student at their math level while challenging them to master new math skills in fun ways. Target skill range 3rd-6th grade. Students need to have a mastery of addition with carrying, subtraction with borrowing, and starting concepts in multiplication and division. [Also see Math & Literacy Games and Math Games Sr.](#)

Techies in Training

Ages: 10 – 15

Computer lab meets AV Club! In this project-based course, students will learn some basic coding, web design, graphic design, videography, video editing, and internet safety guidelines. By using tablets and laptop computers, students will utilize technology to communicate core subject areas: language arts, spelling, social studies and science.

Mighty Roots Academy

Class Offerings 2022-2023

Homeschool Academy: 1:35-2:35 Block

Photography

Ages: 12 – 15

Students will build the foundations of photography in this hands-on digital photography course. We will discuss the art of photography, basic camera settings, study aperture and shutter speeds, the effects it has on the camera, and much more. We will explore photography as an art through creative activities. The students will also work once a month on creating a yearbook for Mighty Roots Academy.

Application required. Application will be emailed to students who choose this course. If not selected, the student will be placed in their second-choice course.

\$20 materials fee

Mighty Roots Academy

Class Offerings 2022-2023

Creative Options

Course Descriptions

Creative Options: 9:35 – 12:35 Block

Forest School

Ages: 5 – 7

Students will enjoy the beauty of nature while learning! This outdoors-designed learning time will explore the wonderful 5-acres that Mighty Roots Academy has to offer. Along with highlighting natural learning opportunities through adventuring and playing, forest schoolers will have two to three teacher-prepared *Learning Times* each program day. These lessons will inspire interest in academics without formal pressure.

This course includes a Lunch and Discovery Play.

Creative Options: 9:35 – 11:35 Block

Musical Theater

Ages: 7 – 15

Students will explore the elements of musical theater as well as learn staging, acting, dancing, and singing skills. Students will put on a short Autumn production and a longer Spring production. Students will need to work on lines and songs outside of class time. No production fees! Shows are free for family and friends!

Additional information: -Students provide their own costumes.

-Families will be required to volunteer several hours to make the shows possible. These hours are separate and in addition to any Service Discount opportunity.

-Dress rehearsal and a few additional practice times will be scheduled.

Creative Options: 9:35 – 10:35 Block

Robotic Club Jr.

Ages: 5 – 9

Students will experience basic coding by using a Sphero Indi with their team! Students will work together to program their Indi to perform various tasks from working through a maze, to pushing objects around a level field, and more. Students will also learn more about the robotic industry and the use of robots in the world around them.

\$25 materials fee

Mighty Roots Academy

Class Offerings 2022-2023

Creative Options: 9:35 – 11:35 Block *(continued)*

Studio Art

Ages: 7 – 11

The Elements of Art and Principles of Design will guide our learning over the course of the year in this highly structured studio course that teaches artistic behaviors (exploration and discovery, inquiry and ideation, skill development and artmaking, reflection and revision, self-evaluation and presentation). The learning guide will facilitate learning by providing instruction on media, materials, and tools at the start of each class period, while the students experience the visual arts as ARTISTS responsible for their own learning, who can then access materials independently to initiate and explore their artwork. Students will learn to persevere through challenges and to trust their own judgment while receiving input from, and offering feedback to, peers and their learning guide. Artist studies, inspiration materials, and guided projects will be provided for students who want or need additional support while transitioning to a self-directed artmaking environment.

Farm to Table

Ages: 11 – 15

This science and nutrition course helps students explore the science, agriculture, manufacturing, marketing, preparation, and consumption of food from the farm to the table. Students in this class will complete 8-12 cooking labs throughout the year. Students will be using cooking appliances such as stoves, ovens, griddles, electric skillets, and knives. Severe allergies and food sensitivities should be discussed before enrolling.

Creative Options: 10:35 – 11:35 Block

Farm to Table

Ages: 6 – 10

This science and nutrition course helps students explore the science, agriculture, manufacturing, marketing, preparation, and consumption of food from the farm to the table. Students in this class will complete 8-12 cooking labs throughout the year. Students will be using cooking appliances such as stoves, ovens, griddles, electric skillets, and knives. Severe allergies and food sensitivities should be discussed before enrolling.

Learning Games

Ages: 7 – 15

Throughout the year students will play different board games, card games, and kinesthetic games! No subject will be left out! We will have fun learning about geology, geography, biology, art, reading, and math all through playing games adapted for all ability levels.

Mighty Roots Academy

Class Offerings 2022-2023

Creative Options: 10:35 – 11:35 Block *(continued)*

Studio Art

Ages: 11 – 15

The Elements of Art and Principles of Design will guide our learning over the course of the year in this highly structured studio course that teaches artistic behaviors (exploration and discovery, inquiry and ideation, skill development and artmaking, reflection and revision, self-evaluation and presentation). The learning guide will facilitate learning by providing instruction on media, materials, and tools at the start of each class period, while the students experience the visual arts as ARTISTS responsible for their own learning, who can then access materials independently to initiate and explore their artwork. Students will learn to persevere through challenges and to trust their own judgment while receiving input from, and offering feedback to, peers and their learning guide. Artist studies, inspiration materials, and guided projects will be provided for students who want or need additional support while transitioning to a self-directed artmaking environment.

Creative Options: 11:35 – 12:35 Block - *Lunch and Discovery Play*

Students will eat their lunch brought from home then have the remainder of the class to play. MRA wants to increase the average 12 minutes per day that an American child spends outside in nature! Unhindered imaginative play, while supervised (but not interrupted) by an adult, is the true work of childhood. Students receive the opportunity to enjoy our beautiful outdoor acreage however they choose. Pickup sports games, pretend adventures, exploring the grounds, or laying in the grass enjoying the sunshine.

Note: Students will go outside daily and should be dressed in weather appropriate clothing. Bring a daily change of clothes in case they are needed. Severe weather alerts will prevent outdoor play but rain, snow, and wind will not.

Creative Options: 12:35 – 1:35 Block

Storybook Journeys

Ages: 5 – 7

Students will explore the wonderful world of books by reading a book every week or two and then focus on developing their learning in a variety of different subjects. Language, math, science, cooking, art, and activities will be drawn from the information found in the book, and extend learning in this fun literature-based course.

Set Design

Ages: 10 – 15

Students will work together with their classmates to create original back drops, set pieces, and props and then watch them come to life for our very own Musical Theater productions at Mighty Roots Academy. Students do not have to be enrolled in theatre to help make our stage amazing and transformed. Students will also have the opportunity to build creations of their own imagination and skill separate from the theater set pieces.

Mighty Roots Academy

Class Offerings 2022-2023

Creative Options: 12:35 – 1:35 Block (continued)

Young Performers Theater

Ages: 5 – 9

This is a great course for young students to explore their comfort on the stage as they learn theater basics in a fun and exciting way. Students will put on a very short skit-style production as a pre-show to the Musical Theater shows in the Autumn and Spring. No production fees! Shows are free for family and friends!

Additional Materials: -Students provide their own costumes.

-Families will be required to volunteer several hours so that the show may go on! These hours are separate and in addition to the Service Discount opportunity.

-Dress rehearsal and a few additional practice times will be scheduled.

Mad Scientist

Ages: 6 – 10

Students will make things grow, glow, and explode in this chemistry-based course through hands-on experiments! They will learn about elements and reactions as well as about some real-life “mad” scientists.

Outdoor Skills

Ages: 9 - 15

This outdoor course gives students hands-on experience with the natural world. Students will develop skills to help them navigate the great outdoors as well as wilderness survival skills. Some of this year's topics may include: plant identification, water filtration, fire starting, campfire cooking, hand woodworking skills, outdoor games, archery, slingshots, and other topics according to students' interests.

Additional Materials: Fixed-blade knife required for some topics.

Creative Options: 12:35 – 2:35 Block

Explorer's Club

Ages: 7 – 10

Students will receive a great opportunity to dive deep into nature themed unit studies by using STEM projects, poetry, nature journaling, group projects, games, and survival skills. They will embark on understanding and appreciating the natural world around them! Students will also engage and learn more about each other as they develop interpersonal skills.

Mighty Roots Academy

Class Offerings 2022-2023

Creative Options: 1:35 – 2:35 Block

Nature Art

Ages: 5 – 8

Students will explore the wonderful world of art while using items found in nature as a basis of their art. Students will explore with leaves as painting tools, use sticks and branches to create 3D art, and so much more. The possibilities are endless!

Creative Options: 1:35 – 2:35 Block (continued)

Dance

Ages: 6 – 15

Students will get to be creative and move their body in this fun introductory dance course. Students will explore several types of dances throughout the year. This course can have multiple skill levels, beginner or experienced.

Gardening

Ages: 6 – 11

Students will get their hands dirty in this course as they explore what it means to be a gardener and botanist! Not only will students help plant a fall and spring garden, but will also make science connections: learn about soil biology, worms, bugs/bugs/bugs (the good guys and the bad guys), and what to do about them! Students will dig into how compost works, and do math as we learn how to plan a garden and how much space each plant needs. While the garden slumbers in winter, students will plan, explore different ways to start seeds, and learn how to cook, ferment, and/or preserve what is grown.

Robotic Club Sr.

Ages: 9 – 15

Students will work with a team and the whole class community to program Sphero RVRs. Students will learn the basics of driving this all-terrain and highly programmable robot, in addition to creating inventions through circuits with Sphero LittleBits. Students may expand into coding with JavaScript, depending on the ability levels of students. Come share your knowledge or learn from others!

\$25 materials fee

Woodworking

Ages: 11 – 15

Entry-level woodworking projects will let students develop hand-woodworking skills as well as experience working with power tools such as: drills, chop saw, table saw, sanders, and other basic power tools to create simple projects. To help prevent down time, students will have a hand-woodworking project to work on while waiting for their turn with power tools or for a learning guide to help them. Students must demonstrate safety skills and pass a safety test before being allowed to use power tools.

\$25 materials fee

Mighty Roots Academy

Class Offerings 2022-2023

Discovery Days Course Descriptions

Morning Session

9:30 a.m. – 11:30 a.m.

Forest School

Ages 4 – 7

Students will enjoy the beauty of nature while learning! This outdoors-designed learning time will explore the wonderful 5-acres that Mighty Roots Academy has to offer. Along with highlighting natural learning opportunities through adventuring and playing, forest schoolers will have two to three teacher-prepared *Learning Times* each program day. These lessons will inspire interest in academics without formal pressure.

Afternoon Session

12:30 p.m. – 2:30 p.m.

Forest School

Ages 4 – 7

Students will enjoy the beauty of nature while learning! This outdoors-designed learning time will explore the wonderful 5-acres that Mighty Roots Academy has to offer. Along with highlighting natural learning opportunities through adventuring and playing, forest schoolers will have two to three teacher-prepared *Learning Times* each program day. These lessons will inspire interest in academics without formal pressure.

Explorer's Club

Ages 7 – 11

Students will receive a great opportunity to dive deep into nature themed unit studies! By using STEM projects, poetry, nature journaling, group projects, games and survival skills, students will embark on understanding and appreciating the natural world around them. Students will also engage and learn more about each other as they develop interpersonal skills.

Outdoor Adventure Skills

Ages 8 – 15

This outdoor course gives students hands-on experience with the natural world. Students will develop skills to help them navigate the great outdoors as well as wilderness survival skills. Some of this year's topics may include: plant identification, water filtration, fire starting, campfire cooking, hand woodworking skills, outdoor games, archery, slingshots, and other topics according to students' interests. Additional Materials: Fixed-blade knife required for some topics.

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