

Course Descriptions for Homeschool Academy Tuesdays & Thursdays 2025-2026



Mighty Roots Academy, 3600 Blue Ridge Ext, Grandview, MO 64030

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Homeschool Academy (T/Th) Course Schedule 2025-26

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10:35			Wild Weather (7-10 yrs)	Who Was? Famous People in History (8-13 yrs)	Book Club: Choose Your Own Adventure (9-13 yrs)	Career Exploration (12+ yrs)	Dissecting Nature: A Hands-On Anatomy Lab (14+ yrs)
11:35	Lunch and Discovery Play						
12:35	Playful Thinkers (5-8 yrs)	Animal Ecosystems (6-9 yrs)	Archimedes' Artists Math Class (7-11 yrs)	Science Lab with Science Fair (8-12 yrs)	Modern Masters Art (9-13 yrs)	Chemistry in the Kitchen (12+ yrs)	Literature: Historical Fiction (13+ yrs)
1:35	Sensory Science (5-8 yrs)	Word Wizards (6-8 yrs)	Storybook Art Studio (7-10 yrs)	Chemistry in the Kitchen (8-12 yrs)	Wild Weather (9-13 yrs)	History of Dance (12+ yrs)	Civics & American Government (14+ yrs)
2:35	All Program Discovery Play						
3:00	Pick-Up						

Homeschool Academy Course Descriptions

Homeschool Academy: 9:35-11:35 2 Hour Block

Creative Explorations

Ages: 5 - 8

Required for K-1st Graders, Recommended for 2nd Graders

Creative Explorations is a dynamic class designed for children aged 5 to 8, where reading, writing, and creativity come together in an exciting, hands-on learning experience. In this class, students will explore the foundations of reading using the curriculum UFLI (University of Florida Literacy Institute), while building writing skills and developing fine motor abilities through engaging, interest-based activities. This class takes learning outside, and all-weather clothing is a must! Whether it's exploring nature and playing imaginatively, or taking a storybook adventure outdoors, kids will enjoy fresh air and open spaces that help reinforce learning in a fun, interactive way.

This course is required for kindergarten and 1st grade students. 2nd grade students are encouraged to join as well, as specified literacy lessons will assist all students to work on their grade-appropriate academic goals.

Additional Materials: raincoat, rain boots, snow pants, snow boots & waterproof gloves.

Homeschool Academy: 9:35-10:35 Block

Literature Adventures:

Around the World in Picture Books

Ages: 7-9

Explore the world with us through children's literature! We'll study a variety of countries and their cultures by reading stories, studying maps, cooking and sampling foods, listening to music, and understanding different cultural celebrations. Students will record their discoveries in a journal to reinforce and expand literacy skills.

Learning Strategies

Ages: 8 – 12

Students will dive into exploring multiple intelligence, learning about how their brains and bodies learn, as well as get real life practice implementing learning strategies to help them in learning and life. Topics like breaking down a task into steps, brainstorming techniques for problem solving, calming their mind and body, and using tools like schedules, skim reading, note taking, and even games to help them learn.

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

X-FACTOR Math

Ages: 10-15

Explore the unknown in math as students find the X factor in this pre-algebra-based course. This year's focus will be on early algebra and pre-algebra concepts brought together with the Mighty Roots hands-on, active approach to learning. Students who enroll in this course should understand and be able to complete advanced addition, subtraction, multiplication and division. *If a student has not yet mastered these skills, it is recommended they take Archimedes' Artist.*

Media Makers

Ages: 13+

Photojournalism and graphic design—all using mobile phones. Throughout the year, students will develop basic skills in capturing images, editing and designing layouts. Students will work together to create a seasonal newsletter that showcases their design work, photos and writing skills which will be shared with their peers and families at MRA. By the end of the course, students will also complete a designed yearbook for Mighty Roots.

Additional Materials: Students will need to provide their own smartphone and/or tablet. iPhone and iPads are preferred. (Preferably models that are no older than 5 years)

Artistic Expression in the Visual Arts

Ages: 14+

Artistic Expression in the Visual Arts is an advanced and dynamic art class designed for middle and high school students who are eager to develop their artistic skills and explore a wide range of techniques and mediums. In this class, students will experiment with drawing, painting, sculpture, and mixed media, expanding their skill set and learning how to translate their ideas into finished works of art. Through hands-on projects, constructive feedback, and mentorship, students will hone their technical skills, improve their creative processes, and gain confidence in their work. While the focus is on artistic exploration and growth, students will also have the option to prepare their work for submission to a national art competition, offering them an opportunity to showcase their talents at a larger level.

Homeschool Academy: 10:35-11:35 Block

Wild Weather

Ages: 7-10

From fire tornadoes to raining frogs, the weather can be as wild as it is fascinating! In this course, students will explore some of history's most extreme weather events while also learning about the everyday weather patterns that shape our world. Through hands-on experiments, engaging discussions, and research, students will discover how meteorologists predict the weather, the tools they use, and how to read the skies—like identifying clouds to anticipate storms. We'll also examine weather folklore, such as the Farmer's Almanac, and compare it to modern forecasting techniques. While we'll explore the power of nature, we'll also learn why understanding the science behind weather helps us respect it rather than fear it. With today's advanced technology and knowledge, we can better prepare for and protect ourselves from extreme weather. Whether your child loves science, mysteries, or the great outdoors, they'll love diving into the world of Wild Weather!

Who Was? Famous People in History

Ages: 8-13

Students will learn about the people who have changed and shaped the world, utilizing the "Who Was?" book series. Presenting true, biographical life stories in an accessible way, these books will be the springboard for fun living history projects. With a focus on immersive experiences and hands-on learning, history isn't boring! **Students may be asked to provide up to 4 "Who Was?" books for the year (Books cost approx. \$5 each).**

Book Club: Choose Your Own Adventure

Ages: 9-13

In this interactive book club, students will read classic Choose Your Own Adventure books and explore how choices shape storytelling. Students will explore different plot paths, discuss character decisions, and develop their own branching narratives.

What to Expect:

Reading: Weekly reading assignments from classic CYOA books to be completed at home.

Writing: Students will write their own CYOA stories with multiple paths and endings.

Discussion & Analysis: Exploring alternate outcomes and story structures.

Collaboration: Group storytelling projects and peer feedback.

This course will involve a significant amount of writing and requires an independent reader of chapter books reading level.

Additional Materials: Students will provide their own copy of each book studied.

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

Career Exploration

Ages: 12+

This dynamic and engaging course is designed for students ages 12-18 who are eager to explore various career paths and learn about entrepreneurship. Through a combination of hands-on projects, guest presentations from industry professionals, and practical tools, students will gain the skills and confidence to manage their career development and explore their entrepreneurial potential.

Dissecting Nature: A Hands-On Anatomy Lab

Ages: 14+

Dissecting Nature is a hands-on, comprehensive course designed for high school students interested in exploring the structure and function of mammalian organ systems. Through comparative analysis, students will examine the similarities and differences between human and animal anatomy, gaining a deeper understanding of biological form and function. Hands-on dissections of various animal specimens will provide practical experience in anatomical study, reinforcing key concepts. This course is designed to enhance students' knowledge of anatomy, from cells and tissues to organs and systems.

Homeschool Academy: 12:35-1:35 Block

Playful Thinkers

Ages: 5-8

Playful Thinkers is an exciting and interactive learning games experience for kids aged 5 to 8, where curiosity is a must, and learning never stops! In this class, students will embark on a fun-filled journey that combines play and education. We'll explore new ideas, discover the world around us, and nurture a love for learning through engaging board games, hands-on activities, and imaginative play. This class will incorporate early learning concepts such as numbers, letters, patterns, and problem solving. There is no subject off limits: we'll play with geography, biology, outer space, math, language arts, and so much more!

Animal Ecosystems

Ages: 6-9

In this course, students will learn about animals and their environments through hands-on experiences using STEM (science, technology, engineering and art). Students will have the opportunity to learn about the earth's different climates and ecosystems, exploring animal behaviors and their connection to their natural environments. Students will have the opportunity to learn about conservation and the purpose of zoos and aquariums.

Homeschool Academy: 12:35-1:35 Block (continued)

Archimedes' Artists Math Class

Ages: 7-11

Explore the beauty of math with art! We'll learn about qualities of numbers, types of lines, shapes, patterns, fractions, symmetry, and more by creating unique works of art that help students integrate mathematical concepts in a holistic way. We'll also explore the stories of mathematicians and artists across history that have helped us gain a better understanding of our universe. These projects will help students begin to build the foundation of understanding that math is all around us.

Science Lab with Science Fair

Ages: 8-12

Experiment, Explore, and Discover! In this hands-on science lab, students will dive into exciting experiments, explore key scientific concepts, and develop observation and inquiry skills. Through interactive activities and journaling, students will document their discoveries, make predictions, and analyze results. As the year progresses, students will also conduct their own science fair experiment, learning how to design an investigation, record data, and create a science fair board. The class will culminate in a science fair where students can present their findings.

Modern Masters Art

Ages: 9-13

Modern Masters is an exciting and creative class designed for upper elementary and middle school students who are eager to dive into the world of modern art. In this course, students will study the work of contemporary artists from diverse backgrounds and cultures, gaining an understanding of how these artists use various techniques, styles, and mediums to express their unique perspectives. Through hands-on projects, students will explore a wide range of materials, from traditional paints and pencils to innovative mediums like fiber and sculpture. Students will be encouraged to experiment with their own artistic voice and reflect on the meaning and themes of modern art, using inspiration from contemporary artists. The course will culminate in a capstone project, where each student will apply their skills and creativity to produce a unique, personally meaningful final piece.

Homeschool Academy: 12:35-1:35 Block (continued)

Chemistry in the Kitchen

Ages: 12+

Unleash your inner scientist and chef in Chemistry in the Kitchen, where food and science come together in exciting and delicious ways! This hands-on course explores the chemistry behind cooking and baking, showing students how temperature, pH, molecular structures, and chemical reactions transform ingredients into the meals we eat. Through interactive experiments and real-world applications, students will gain a deeper understanding of chemistry while developing practical cooking skills. Perfect for aspiring chefs, food enthusiasts, and curious minds, this course makes learning science fun, engaging, and delicious!

Literature: Historical Fiction

Ages: 13+

This high school English/Language Arts based course will use the historical fiction genre of literature to bring history to life. Students will read 5-6 works of literature throughout the year. Historical fiction is a powerful tool for teaching history, as it brings the past to life in an engaging and relatable way. It allows students to experience historical events through the eyes of characters, making history more meaningful and memorable.

Textbooks often present events in isolation, but historical fiction shows how they fit into the broader social, political, and cultural landscape. Historical fiction demonstrates how individual choices, cultural shifts, and political movements shape history. Essay writing will be a component of this course. **Reading will be assigned outside of MRA class times. Students will need to provide their own books and/or audiobooks.**

Homeschool Academy: 1:35-2:35 Block

Sensory Science

Ages: 5-8

Taste, touch, sight, smell, sound! Students will explore the wonders of the world around us through hands-on projects, literature, experiments, and games. Scientific observations will be logged in science journals, developing literacy skills, math skills, and more. **Students may take this course for up to 3 years, as topics rotate.**

Word Wizards

Ages: 6-8

Through creative and engaging lessons that incorporate games and active learning, students will continue to develop their skills in handwriting, spelling and familiarity with navigating words. This is recommended for students who are at a K-2nd grade level in handwriting, spelling, and writing stamina.

Homeschool Academy: 1:35-2:35 Block (continued)

Storybook Art Studio

Ages: 7-10

In this engaging, project-based art class, young artists will dive into the magical world of children's literature, using classic and award-winning picture books as inspiration for creative expression. Each session will begin with a read-aloud of a beautifully illustrated book, followed by an art project inspired by the story's themes, characters, or artistic style. Students will explore a variety of materials and techniques, from painting and collage to printmaking and sculpture, while developing fine motor skills, creativity, and an appreciation for visual storytelling. This class celebrates the artistry of beloved illustrators and encourages students to experiment with their own imaginative ideas in a fun and supportive environment. Perfect for lower elementary students, this class fosters a love of reading, art, and self-expression through hands-on, literature-inspired creativity!

Chemistry in the Kitchen

Ages: 8-12

Get ready to mix, bubble, and fizz in Chemistry in the Kitchen! In this fun and hands-on class, young scientists will explore the amazing science behind cooking and baking. Through exciting experiments using everyday ingredients, students will learn how chemistry shapes the food we eat. With plenty of interactive experiments and edible discoveries, this class makes science delicious and fun!

Wild Weather

Ages: 9-13

From fire tornadoes to raining frogs, the weather can be as wild as it is fascinating! In this course, students will explore some of history's most extreme weather events while also learning about the everyday weather patterns that shape our world. Through hands-on experiments, engaging discussions, and research, students will discover how meteorologists predict the weather, the tools they use, and how to read the skies—like identifying clouds to anticipate storms. We'll also examine weather folklore, such as the Farmer's Almanac, and compare it to modern forecasting techniques. While we'll explore the power of nature, we'll also learn why understanding the science behind weather helps us respect it rather than fear it. With today's advanced technology and knowledge, we can better prepare for and protect ourselves from extreme weather. Whether your child loves science, mysteries, or the great outdoors, they'll love diving into the world of Wild Weather!

Homeschool Academy: 1:35-2:35 Block (continued)

History of Dance

Ages: 12+

This class will take a robust look at history as told through dance. Students will step into the world of dance history and learn how dance styles influenced, and were changed by, the culture and society of the times. We will use a cross-curricular approach, including video examples; opportunities to experience and practice different types and techniques of dance; language arts; multi-media art; and one or two optional field trips to local dance performances. We will explore ballet's creation in 1600's France through its evolution to current ballet, to cultural dances of countries like Bali, India, and Ireland, all the way through modern, contemporary, tap, jazz, hip hop and breakdance of the United States. And you can't dance without music (or can you?) so we will also explore musicians famous for creating dance accompaniment masterpieces, some of which your students may have heard in everyday life.

Civics & American Government

Ages: 14+

High school students will study the purposes, principles, and practices of American government as established by the Constitution. A focus will be on each person's rights and responsibilities as citizens and how to exercise these rights and responsibilities in local, state, and national government. Students will learn the structure and processes of the government of the states of Missouri and Kansas, as well as various local governments. As always at MRA, hands-on projects and active learning will be incorporated through each unit.