Grades 2 – 3

Seven choices

The Ecology of Our Communities: Science All Around Us
Fun with Creative Writing!
Human Diseases and How We Fix Them
Medieval to Modern—An Exploration of Sound!
Money Matters!
Physics: The Way the World Works
The Surprising Science of the Chesapeake Bay

The Ecology of Our Communities: Science All Around Us

Ever wonder about what makes the water in our homes different from the water in puddles or ponds? Or how the way we travel between school and home affects the environment? This course will explore questions like these, which show how science is a huge part of our everyday lives. Come join us as we explore Charlottesville and the surrounding areas and develop scientific studies of your questions that you can explore.

Fun with Creative Writing!

Want to be the next J.K. Rowling? Here's your start! In this course, you will unleash your imagination through various activities, which will include developing characters, settings, and plots. You’ll also be writing poetry like haiku (a traditional Japanese poem), and you'll challenge yourself by trying to tell an entire story with only 10 words. You’ll also get the chance to find inspiration from famous stories and poems, develop stories as a group, and get helpful feedback from your teacher and your classmates. You'll walk away feeling full of potential and ready to write the next mega-bestseller!

Human Diseases and How We Fix Them

In this course, students will learn the fundamental concepts of human physiology, pathology, and health. We will explore questions like: What happens when the human body no longer functions normally? How does each organ work to maintain health when things go awry? How does modern medicine treat diseases? Each class will address a specific healthy physiological state, how this healthy state can begin to decline, describe the physiology of the unhealthy state, and explore how the human body and modern medicine together fight this disease. Come explore the fascinating world of human health!

Medieval to Modern—An Exploration of Sound!

Gather around as we explore music throughout the ages! Prepare for a fantastic journey that will allow you to hear music that graced the halls of kings, inspired architects, impassioned painters, galvanized poets, and invigorated soldiers. Together we will map the development of music from the Medieval Era onward. We will discuss how music deeply impacted art, politics, science, war, and much more! You will explore how musical instruments were created throughout history and listen to their different timbers. There will also be live classroom demonstrations on many contemporary and ancient instruments, and an opportunity to build one of your own!

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Money Matters!

Fast-forward 20 years into the future: you're all grown up and have a job! All your dreams can come true, but what should you do with your money? Join us in Money Matters to find out! You will work as your own financial adviser as you learn to budget your money, and then make decisions about how to spend your money. We will take our talents to Wall Street to try our luck with the stock market, using data to track how our stocks do over time. We will explore questions like: How much money should you save every month? What kind of car should you buy? Which stocks are best to invest in? Come use your critical thinking and problem-solving skills to create a life you want to live!

Physics: The Way the World Works

Calling all junior scientists and engineers! Unlock the everyday mysteries of modern life by exploring the basic physics we interact with on a daily basis. This course will investigate some of the core principles in scientific areas, such as mechanics, kinetics, and thermodynamics. Along the way you will learn about famous scientists who asked many of the same questions you have and devised clever ways to answer them. We will go beyond the facts and use our scientific knowledge and math skills to predict the outcome of simple, hands-on experiments we can perform in class. Then, we will use critical thinking to evaluate the results and reinforce/advance our knowledge. Finally, we will explore how these concepts apply to modern, real-world issues using engineering problem-solving skills. Bring your curiosity and your thinking cap to class!

The Surprising Science of the Chesapeake Bay

Are you interested in becoming a scientist? What better way to start than to learn more about what's around you! Specifically, this class will look at the Chesapeake Bay, which is east of Charlottesville, and aquatic ecology. We will explore the watershed and the organisms that live there. Through hands-on experiments and scientific investigations, we will learn about topics like chemistry, eutrophication (excess nutrients), invasive species, food chains, and other physical aspects of aquatic environments. Topics may include aquaculture, amphipods, and anoxic environments. Come explore what's really going on in the water!