Spring Super Saturday Courses 2016

PreK – K

ICKY, STICKY, AND FUN
Have you ever wondered what makes your pancakes fluffy? There are messes to be made and things to explore. Only the most curious minds are needed in this laboratory. Come to this class and become the world’s most creative chemist or inventor of the gooiest gunk ever glopped!

MY BACKYARD: A MUSICAL EXPLORATION OF LIFE IN THE BACKYARD
Work as scientists, authors, artists, and performers to understand the creatures you see every day in your backyard. Research the habits and habitats of the hummingbird, pillbug, ladybug, butterfly, snail, and firefly. Sing short songs reinforcing what you have learned. Finally, participate in a musical play and awards ceremony that has everything to do with your backyard!

VISUAL MATH
Explore math through the senses as we work with shapes and bubbles, nature, flying discs, spaghetti puzzles, fractionated cookies, and more. Who knew math could be this fun?

SPACE RACE: EXPLORING THE SOLAR SYSTEM
As cooperative Space Exploration Teams travel to each Solar Stop, you research the locations (planets, asteroids, comets, and meteors), write about them in your Space Explorer's Log, read stories and complete a variety of interactive activities. With the help of various references, you gather galactic facts and complete activities cooperatively and individually.

Grades 1 – 2

OUR ROCKIN’ EARTH
Discover our amazing planet, inside and out! Learn about what Earth is made of down to the main minerals and rocks and find out what major geologic processes occur on and below the surface. We will turn back time to see how our world has changed over billions of years!

ENGINEERING WITH A TWIST
We will design, build and test engineering projects such as pom pom launchers, marshmallow towers, and marble roller coasters, all built from common household items. You will be guided to think critically about your projects like an engineer.

KITCHEN CHEMISTRY
Your kitchen is one big chemistry lab! We will explore colors, solids, liquids, gases, polymers, chemical reactions, mixtures, solutions, and more. You will use your new kitchen chemistry knowledge to create snacks that go along with the lesson of the day and learn how chemistry is alive in your own home! (Supply Fee: $5)

THE TRAVELING PAINTBRUSH
In our class you will learn about art styles that range throughout history and engage in exciting art projects in those styles. We will work with our minds, as well as our hands, to make unique
artwork. You will be challenged to learn new techniques and vernacular when it comes to artistry.

**Grades 3 – 4**

**SUB MONTE IRATO**
You will be introduced to the Latin language and the culture of the Roman Empire. Lessons revolve around a Pompeian family living “Sub Monte Irato” (Under the Angry Mountain). We explore life in the shadow of Mt. Vesuvius in 79 CE, just before the volcano erupted and buried the city for almost two thousand years.

**MINI MED**
We are looking for talented future doctors. Explore the world of medicine to understand what it takes as you dissect various specimens. Learn about human anatomy, physiology, immunology, microbiology, systems of disease, and more.

**“WATER” YOU IN FOR**
What is lurking in the water? Through experimentation and observations, you investigate stream habitats, water pollution and pH levels, as well as conduct group problem-solving sessions to learn more about the streams’ natural ecosystem. Using insects as indictors, you will judge the “health” of a stream and learn how alterations to the stream ecosystems affect the water quality.

**HOUSE DESIGN**
From mansions to townhouses, architecture is in the works! You will build an understanding of the problems and pleasures of designing a house by learning the different types and necessary elements of house design, the correlation between income and mortgage eligibility, and the costs of house construction and home furnishings. Some of the activities include evaluating the pros and cons of building single-family homes, calculating the number of square feet in a given area, and designing and drawing specific floor plans.

**SEARCHING THE AFRICAN SAFARI**
On this African Safari, explorers will research and experience all of the wonderful characteristics of animals and habitats found in this vast continent. This adventure will allow you to learn about the culture and regions of Africa, and just how different it really is!

**Grades 5 – 8**

**AUTO ‘BOTS**
Driver safety, convenience, and the “cool factor” drive the development of autonomous vehicles, like those made by Google and Tesla. In this course, you will learn the foundations of autonomous robots by designing and developing a custom line-following robot. Through each session of the source, you will learn how different parts of the project work while building custom modules for your robot.
WE WRITE BACK: PURDUE YOUNG WRITERS WORKSHOP
Are you a middle school student who loves to write? Then this course is for you. We will inspire each other to develop our talents and explore new writing genres. You will learn about and write in the following genres: hint fiction, flash fiction, the short story, the personal essay, poetry, and hybrid forms.

RUBE GOLDBERGINEERING
Have you ever seen a Rube Goldberg design? Come join a design team to brainstorm and build creative contraptions to solve everyday problems in a complex way like how to use a hammer, a pulley, and twelve rubber bands to put toothpaste on a toothbrush. We use hands-on activities to focus on science, technology, and engineering concepts!

FUN WITH PROGRAMMING
Do you want to learn a programming language like those used to create computer games? Do you want to design your own computer game? Join the class and you will learn a computer language that will enable you to design programs to solve simple programs and maybe create a game or two.