## **On-Campus Course Description**

## June-23rd-27th 9:00 am -3:00 pm

#### Make Your Own Video Game

#### 2nd-4th

Have you ever imagined creating your very own video game from scratch? In this course, you'll learn to program using Scratch, a language developed by MIT! You'll acquire skills in computational thinking, including iteration, testing, and debugging, as well as essential programming concepts like looping, conditional statements, and beyond!

### Lego Robotics I

3rd-5th

This is a beginning course in robotics. We will be utilizing Lego Mindstorm kits. The objective of this course is to introduce the student to basic programming as well as problem-solving strategies. This course will involve students in the development, building, and programming of a LEGO Mindstorm robot. Students will work to design, build, and program. Topics may include motor control, gear ratios, friction, sensors, program loops, decision-making, and timing sequences. Student-designed robots will be programmed to complete various assigned tasks (challenges).

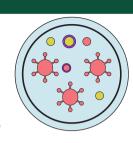


## **Creative Writing**

4th-6th

Dive into the world of storytelling with our "Creative Writing" course, designed for aspiring writers eager to explore their creativity and refine their craft. This immersive program offers a comprehensive introduction to various genres of creative writing, from fiction and poetry to memoir and screenwriting. Whether you're an absolute beginner or looking to enhance your writing skills, this course will provide the tools, techniques, and inspiration to bring your stories to life.





### Microbes without Borders

4th -6th

This course investigates the importance of the diversity of microbes and their significance in our everyday lives. Different microbes are explored in readings, audiovisual materials, and hands-on explorations. Topics include viruses, bacteria, parasites and fungi, microbes and art, bioterrorism, GMOs and biotechnology, food production, and the role of microbes in agriculture. Issues like disease spread and prevention, vaccines, and drug resistance will be examined. Students will participate in a microbiology techniques lab and epidemiology research and plan to solve some of the global issues that are currently facing humanity.

#### **Ecosystems**

4th-6th

In this course, students will investigate the relationships among organisms in an ecosystem. They will explore physical and behavioral adaptations, as well as the living and nonliving components of the environment. The concepts studied in third and fourth grade will be expanded upon, including interrelationships in populations, communities, ecosystems, organism niches, and the interactions of organisms in the ocean environment. Additionally, students will learn about limiting factors, carrying capacities, and population changes over time. Students will work on an ecosystem diorama to show what they have learned throughout the course.





### **On-Campus Course Description**

# June-23rd-27th 9:00 am -3:00 pm

### What's Your Quest? Crafting the Hero's Journey 5th-7th

Imagine a long journey including a wise old man, strange creatures, dangerous challenges, and a triumphant return. Heard it before? Of course, you have because they are all characteristics of the Quest Hero motif seen throughout generations of literature, visual, and performing arts. Join us as we learn about the Quest Hero, and apply this knowledge in creating an original production we perform that includes the use of shadow puppets inspired by Indonesian Wayang kulit theater.

## Mind Matters-Intro to Psychology

7th -9th Grade

Interested in taking AP Psychology? Let's explore the basic principles and theories of Psychology, including personality, learning, memory, intelligence, and human behavior. Each class would provide hands-on activities and/or demonstrations, such as identifying brain parts, memory activities, personality tests, and identifying types of abnormal behavior. Come discover and learn how and why our brains develop by studying and understanding mental processes, brain functions, and behaviors.



### **Statistics Sanity**

Grades-7th-9th

Through Statistics Sanity students will lay a foundation of statistical knowledge through fun experiments involving real-world data. Whether it be exploring the probability principles in a hands-on casino or conducting surveys about favorite candy or video games, students will collect, analyze, and draw conclusions in various settings. There will be projects students will create to help build skills in statistics. This is a great course to prepare students for high school or college Statistics. The use of technology (TI Graphing Calculator) and supplemental videos will be an integral part of the sessions.



### Dive into Oceanography!

Grades-8th-10th

Did you know the Earth should technically be called an Ocean? Covering over 70% of our planet, the world's ocean is Earth's biggest habitat. If you are curious and passionate about the ocean, spend a week diving into oceanography! On the first day, you will discover the many early ocean explorers and their contributions to mapping the world, discovering seafloor features, and early oceanographic research on animals. Case studies of modern scientific expeditions and the fascinating careers available to you as a future oceanographer will also be a focus of our activities and discussions. Each successive day in Dive Into Oceanography will be a deep dive into one of the four disciplines of oceanography: geological, chemical, physical, and biological oceanography. Using many hands-on experiments and demonstrations, students will learn all about the geology of the seafloor, the chemistry of seawater, the mathematics of ocean physics, and the amazing life in the ocean - from the daily vertical migrations of the smallest plankton, the eyebrow-raising flying squids, and the sometimes strange, yet fascinating behaviors of whales!



#### The Art of Drawing 7th-12th



Welcome to Drawing Class, where your imagination takes the lead! Whether you're a doodler or a detail-lover, this class is all about exploring your creativity. From sketching basics to bold masterpieces, we'll dive into techniques that make your ideas come to life. Grab your pencils, let's turn those blank pages into works of