#### **PLANO EXPLORATION SUMMER 2024**

# **ELEMENTARY CLASS DESCRIPTIONS: Grades 1-4 (current grade level during the 23-24 school year)**

Students who are currently in grades 1-4 in the 23-24 school year will participate in **THREE** 75-minute classes. Some classes may include students of varying ages.



#### **SCIENCE EXPLORATION**

Students participate in a variety of exciting, hands-on experiences.

- **Think Like a Scientist (Grade 1)** Explore curiosities and develop the skill of making observations and asking questions while performing investigations.
- *Investigate! (Grade 2)* Dig deep into Newton's Laws of Motion through investigations and demonstrations to understand science in the world.
- **Discover Life Science (Grade 3)** Uncover the mysteries of life science while exploring animal and plant cycles including dissection of crayfish and frogs.
- **Engineering and Design (Grade 4)** Dive into the engineering design process to create and test various structures such as airplanes, parachutes, kites, and bridges to be as structurally sound and effective.



### LITERACY AND LANGUAGE

Students develop advanced language skills through technology, reading, writing and communication.

- **Bloom with Books (Grades 1-2)** Discover the story behind various book awards, including the famous Caldecott Award while engaging in literacy that will inspire a variety of creative experiences.
- Become an Author! (Grades 3-4) Develop your love of stories and creative ideas into written
  products. Collaborate with fellow authors to polish and refine your writing and share your work.



#### MATHEMATICAL PROBLEM SOLVING AND DESIGN

Students learn and apply advanced math skills to create unique products.

- **Design a Clubhouse! (Grades 1-2)** Encounter unusual problem solving situations to help design a new space.
- Design a Breakout Puzzle! (Grades 3-4) Design a digital breakout puzzle applying newly acquired math strategies and skills.



## **LOGIC AND REASONING**

Students develop logic and reasoning skills using clues to solve problems.

- **Be a Detective! (Grade 1)** Become a detective and apply logical reasoning skills to discover the identity of secret characters.
- Logic Breakout (Grade 2) Escape room meets logic puzzles! Sharpen deductive reasoning skills through collaborating and decoding as you decipher an abundance of clues to BREAKOUT!
- Super Sleuth (Grades 3-4) Uncover the truth using inference skills to examine fictitious mystery cases. Theories are made and may change as more evidence comes to light connecting the culprit to the crime. All new mysteries every year!



#### **CREATIVITY AND DESIGN**

Students explore their own creativity through products and performances.

- Great Galleries (Grades 1-4) Create original art using various media for a student gallery.
- **Put on a Show! (Grades 3-4)** Learn the fundamentals of theater to create and perform a play or musical while developing public speaking and acting skills.



### INNOVATIONS THROUGH INQUIRY

Students develop research and communication skills to produce advanced products.

- **Powerful Presentations (Grades 2-4)** Step into the role of marketing at an advertising agency while learning presentation skills using media to develop a powerful sales pitch.
- Where in the World? (Grades 2-3) Become a virtual explorer traveling the globe to inquire about past and present wonders of the world by researching their location, significance, function, and importance.



# **COMPUTER SCIENCE**

Students learn the language of coding through building programs.

• *The Power of Coding (Grades 2-4)* Investigate the significance of computer coding in this hands-on session while using logical reasoning to diagnose and solve problems.

## MIDDLE SCHOOL CLASS DESCRIPTION: Grades 5-7 (current grade level during the 23-24 school year)

Students who are currently in grades 5-7 in the 2023-2024 school year will choose one strand to follow and rotate through that strand's experiences. Classes will include students of varying ages.



### Paracosm: In Other Worlds (Grades 5-7)

A paracosm is a detailed imaginary world created inside one's mind which could include things that exist in reality or it may contain entities that are entirely imaginary, alien, and otherworldly. What would this imaginary world be like? Students work in a collaborative project-based environment using research and technology skills to develop a deep understanding of the Humanities, stretching their creativity and imagination. **Students will rotate through the following courses:** 

- **Humanities I** Through a study of forms of government, culture and mythology, students create a new world that makes an impact on society.
- Humanities II What does fashion, cuisine, education and leisure look like in an imaginary world?
   Students explore examples of these features in both real world and fictional creations to enhance their unique idea.
- *Multimedia* Using various programs , students will learn to create advanced products and presentations of their imaginary world.



## Communications (Grades 5-7)

As the digital age continues to advance, it's never been easier for students to learn the art of podcasting, video production and social media. Students learn the art of storytelling and marketing while empowering learners to develop technical skills. **Students will rotate through the following courses:** 

- **PodQuest: Find Your Voice** Create imaginative and original stories through collaborative learning with podcasting. This hands-on curriculum includes curated content from top podcasters who offer their advice to you, an up-and-coming audio artist.
- Video Production: Lights, Camera, Creators Video Production empowers learners with technical skills in filming and video editing while exploring the historical significance of film and the unique elements of storytelling. From collaborative storyboarding to lighting and audio, each scaffolded activity builds upon the previous day, culminating in a final film project that movie makers proudly share at the end of the program.
- Marketing & Social Media: Trendsetters Investigate building a personal brand and learn about the
  importance of digital citizenship, an introduction to social media and the opportunity to learn about
  the different content that can be created. Students will explore simple marketing concepts and how
  to identify the power of branding.



## STEM (Grades 5-7)

Explore the world of **S**cience, **T**echnology, **E**ngineering and **M**ath to develop problem solving and critical thinking skills in unique ways. Students are inquirers as they learn to problem solve through coding and investigate through scientific thinking. **Students will rotate through the following courses:** 

- Advanced Vertical Robot Flying Enhance your learning environment by experiencing the world's
  fastest-growing technology first-hand in an exciting collaborative learning environment. These flying
  robots have programmable lights with access to sensors that make it a great way to learn code using
  Python and focus on engineering skills in the classroom.
- **CodeXplorers** Preparing students for middle school, high school and beyond, participants will be exposed to new areas of learning in the field of computer science. Through instruction and programming, students will be challenged to implement skills and knowledge as they learn through Python programming.
- Animal Science:Zoo Sleuths Dive into biodiversity and the complex relationship between animals
  and their environments through our habitat construction challenge. Students visit Plano ISD's
  Holifield Science Learning Center, participating in hands-on STEM activities, uncovering animal
  adaptations, learning about conservation, and becoming a habitat protector.

Planning Guide-Course Options by Grade (current grade level during the 23-24 school year)	
1st Grade (select 3 courses)  ☐ Think Like a Scientist ☐ Bloom with Books ☐ Design a Clubhouse ☐ Be a Detective! ☐ Great Galleries 1-2	2nd Grade (select 3 courses)  ☐ Investigate! ☐ Bloom with Books ☐ Design a Clubhouse ☐ Logic Breakout ☐ Great Galleries 1-2 ☐ Powerful Presentations ☐ Where in the World? ☐ The Power of Coding
3rd Grade (select 3 courses)  □ Discover Life Science □ Become an Author! □ Design a Breakout Puzzle! □ Super Sleuth **all new mysteries every year** □ Great Galleries 3-4 □ Put on a Show! □ Powerful Presentations □ Where in the World? □ The Power of Coding	4th Grade (select 3 courses)  Engineering and Design  Become an Author  Design a Breakout Puzzle!  Super Sleuth **all new mysteries every year**  Great Galleries 3-4  Put on a Show!  Powerful Presentations  The Power of Coding
<ul> <li>5th-7th Grade (select 1 strand)</li> <li>□ Paracosm: In Other Worlds-Humanities I, Humanities II, Multimedia</li> <li>□ Communications — PodQuest: Find Your Voice / Video Production: Lights, Camera, Creators / Marketing &amp; Social Media: Trendsetters</li> <li>□ STEM — Advanced Vertical Robot Flying / CodeXplorers / Animal Science: Zoo Sleuths</li> </ul>	