The Center for Gifted ~ Midwest Torrance Center for Creativity

2019 Summer Wonders in Lincolnshire

Session I: July 1-5 *(no classes July 4)*

Course offerings for students entering grades K-7
(Attend two for half day or four for full day)

Advanced Chess (3-7)
Bibliomania (K-2)
Chess Club (K-7)
Coding with Arduino: Create Digital Devices and Interactive Objects (5-7)
DIY Hammock: Hang and Relax (5-7)
Edible Architecture (K-5)
Electricity and Play Dough Circuits (K-4)
Explore the Elements (K-4)
Grow Your Own Microbes (2-7)
Lego Mindstorms Robotics (3-7)
Lego Mindstorms Robotics for Girls Only (3-7)
Make with Makey Makey (3-7)
Stock Market and Economics (3-7)
Writing and Art (3-7)

For students entering PK-K

Happy Fourth of July!
Space Explorers

Session II: July 8-12

Course offerings for students entering grades K-7
(Attend two for half day or four for full day)

Abstract Strategy Games (3-7)
Artbotics (4-7)
Cooking Science (3-7)
Detective Science (1-4)
Domino Effect (3-7)
Lego WeDo Robotics (K-4)
Math of Chance (K-5)
Maze Game Design with Power Point (3-7)
Put On a Musical Review (K-7)
Readers Theater (4-7)
Scientific Shenanigans (K-2)
Short Stories (3-7)
The Knots Have It! (3-7)
Zoology (K-3)

For students entering PK-K

Amazing Dinosaurs
Mad Scientists Loose in the Kitchen!

Session III: July 15-26

Course offerings for students entering grades K-7
(Attend three for half day or six for full day)

Art Unlimited (K-5)
Biology (3-7)
Chemistry Lab (3-7)
Coding with Arduino: Build Your Own Robot (5-7)
Coding with Scratch (3-7)
Coding with Scratch without Boys (3-7)
Creative Writing (3-7)
Graphic Novels (4-7)
Improv and Theater Games (1-7)
Leaving Earth: The Challenges of Visiting Outer Space (1-4)
Lost Civilizations (4-7)
Math Puzzles and Strategies (4-7)
Math, Clues, and Codes (K-3)
Passport to the World: Intercultural Adventures (K-4)
Project-Based Engineering (K-5)
Put on a Musical (K-7)
Snap! Crackle! Pop! Chemistry (K-2)
Ukulele: Strings, Chords, and More (1-5)

For students entering PK-K

Ocean Explorers
Stories and Art: The Caldecott Winners

Unique summer challenges for advanced learners entering grades PK-7!

Course Descriptions, Grade Levels, & Lab Fees:

For students entering grades K-7

All courses below are offered both mornings and afternoons. Students enjoy two 80-minute classes each half day for the first two Sessions and three 53-minute classes each half day for the third Session. Each Session, they select their favorite courses from among the many offerings below. Note that for courses spanning several grade levels, students are placed in classes with their age peers.

Abstract Strategy Games: Explore a new world of board and card games. Challenge your opponents or work together to solve common problems. Euro-style games offer a level of abstract strategy and teamwork not found in games like Sorry! or Monopoly. *(3-7)*

Advanced Chess: Dive deep into the game! Learn not only how to record your games through chess notation, but also how to utilize strategies of the masters. *(3-7)*

Art Unlimited: Create multi-dimensional masterpieces of mixed media, methods and muses, such as collage, printmaking, sculpture, drawing, pastels and watercolor. *(K-5)*

Artbotics: Do you enjoy both the technical and the creative? Explore this imaginative technology, which brings together art, robotics, and computer science and encourages creativity as integral to the construction and programming of robots. *(4-7; $15 lab fee)*

Bibliomania: You're the author, illustrator, and publisher. Transform your creative ideas and vivid imagination into stories and illustrations as you produce your own literary masterpieces. *(K-2)*

Biology: Investigate the living world. Study the anatomy and physiology of living organisms—animal, vegetable, and mineral. Explore such topics as cell biology, genetics, and animal behavior. *(3-7)*

Chemistry Lab: Explore chemical properties through hands-on experiments. Investigate molecular structure. Experiment with solutions, solvents, and reactants, but don't blow up the lab! *(3-7)*

Chess Club: Analyze winning strategies, from opening moves to end-game tactics. Incorporate these strategies into your own chess games and watch your skills improve. *(K-7)*

Coding with Arduino: Build Your Own Robot. Put together a walking spider robot toy. Equip it with flashing lights and an Arduino brain. Give it eyes and ears so it can avoid obstacles and come when you call. Use your imagination to add more behaviors. *(5-7; $30 lab fee)*

Coding with Arduino: Create Digital Devices and Interactive Objects. How do we use programming to make useful devices? Learn to use a microcontroller to control LED light displays, make simple musical instruments, respond to remote controls, measure and display temperature, and communicate by radio. *(5-7; $15 lab fee)*

Coding with Scratch: Learn the basics of coding with Scratch, a free and easy-to-use coding language developed at MIT. Assemble lines of code and work toward creating your own project. ***A free Scratch account is required; we will register accounts on the first day. Visit scratch.mit.edu for more information.*** *(3-7; $10 lab fee)*

Coding with Scratch without Boys: Exactly the same as Coding with Scratch but no boys allowed! ***A free Scratch account is required; we will register accounts on the first day. Visit scratch.mit.edu for more information.*** *(3-7; $10 lab fee)*

Cooking Science: Do measurements matter? What do such terms as solution, emulsion, suspension, and colloid mean? Why use a certain temperature rather than another? Why a microwave instead of a crock pot, or vice versa? Discover the science of this age-old art while cooking and tasting. *(3-7)*

Creative Writing: Do you like to originate ideas, create characters, design plots, and express yourself through writing stories and poems? Using various catalysts, such as posters, paintings, books, music, and class discussions to inspire you, share your creativity through writing—in whichever genre suits your style. *(3-7)*

Detective Science: Whet your sleuthing skills and begin an investigation. Can you decode the clues, analyze the evidence, and solve the case? *(1-4)*

DIY Hammock: Hang and Relax. It's summer, and a perfect time for an elevated perspective on life. Many experts approve of using the outdoors to restore our minds as well as our bodies. You can accomplish both of these by building a hammock. Use math, sewing, rope craft, and situational awareness to create your own, hang it safely, avoid the awful "banana lay" and optimize your lazy days of summer! *(5-7; $20 lab fee)*

Domino Effect: In this Maker Space type of class, the goal is to work together as a team to create a chain reaction that leads to an ultimate goal. A blending of creativity, collaboration, and critical thinking is crucial if we are to achieve what must be done. We'll begin with basic domino sets and practice various setups, then substitute everyday objects, such as boxes, rulers, toys, and string, to build a chain that meets given requirements. Ready, set, create! *(3-7)*

Edible Architecture: Just as it sounds. Harness and blend your art, design, and culinary skills to build structures out of things that you can eat! *(K-5)*

Electricity and Play Dough Circuits: Create your own circuits using conductive and insulating play dough to light LED's, run motors, and play sound. Use meters and an oscilloscope to study the flow of electric current. Design and construct creatures incorporating LED's and sound. *(K-4; $15 lab fee)*

Explore the Elements: Discover the four properties of the world through play and experimentation! Explore air, earth, light and water through floating ping pong, creating a magnetic painting, designing a reflective maze, and making a rain cloud. *(K-4)*

Graphic Novels: Do you like comic books, unique illustrations, creating unusual art, or writing stories? The graphic novel is one of the most popular and exciting ways to tell a story. Investigate the fundamentals of this creative expression, including panel to panel, text to images, and page layout, then use this singular art form to express your own literary ideas. Develop an original story, create the characters and dialogue, and plot out the storyboard. *(4-7)*

Grow Your Own Microbes: Swab surfaces and things dirty and smelly, clean and shiny, to gather your microbes. Prepare your own petri dishes and experiment with your microbes to discover what nutrients they need to grow. Take your petri dishes home (carefully sealed) and see what comes up! *(2-7)*

Improv and Theater Games: Do you like to think on your feet? Do you delight in new possibilities? Learn how to act through improvisation! Learn the fundamentals of improvisation—the basic tools, rules, and philosophy—through theater games, drills, and simple scenes. Have a great time improvising with your classmates in a supportive and noncompetitive atmosphere! *(1-7)*

Leaving Earth: The Challenges of Visiting Outer Space. Discover the major differences between the environments on earth and in outer space and the engineering challenges that arise because of these differences. How does the human body change and adapt to its surrounding environments? *(1-4)*

Lego Mindstorms Robotics: Tackle various engineering challenges. Construct robots from motors, wheels, gears and sensors, and program them to solve challenges. *(3-7, $15 lab fee)*

Lego Mindstorms Robotics for Girls Only: Same as Lego Mindstorms Robotics, but no boys allowed. *(3-7; $15 lab fee)*

Lego WeDo Robotics: Select your favorite robot, such as alligator, goalie, or airplane. Follow its building plans to bring it into shape using Legos, motors, gears and sensors. Connect to a laptop to program your robots' actions and sounds. *(K-4, $15 lab fee)*

Lost Civilizations: Why did entire ancient civilizations disappear? What can we learn about them from the structures, statues, and artifacts left behind? Explore the intriguing history and mysteries of lost civilizations. *(4-7)*

Make with Makey Makey: Use cardboard, wires, and other household materials to make game controllers, instruments and other fun projects using Scratch and Makey Makey Boards. ***A free Scratch account is required; we will register accounts on the first day. Visit scratch.mit.edu and makeymakey.com for more information.*** *(3-7; $15 lab fee)*

Math of Chance: Explore games and puzzles, principles of probability and problem-solving techniques. Maneuver the mathematical and physical variables, like pennies, pies, and dice. *(K-5)*

Math Puzzles and Strategies: Investigate logic-based problem solving. Tackle challenging problems and intriguing puzzles created for math competitions. Equip yourself with useful strategies that will come in handy far beyond the classroom! *(4-7)*

Math, Clues, and Codes: Come one, come all, to crack codes in math and unravel the mysteries of math. Investigate logic-based problem solving. Ponder enigmatic puzzles and perplexors. *(K-3)*

Maze Game Design with PowerPoint: Using interactive animation and hyperlinks teamed with slide transitions, effects, and timing, create mazes in PowerPoint. Design trick walls and create illusions to baffle friends and family. Will they find their way out of your maze? *(3-7; $10 lab fee)*

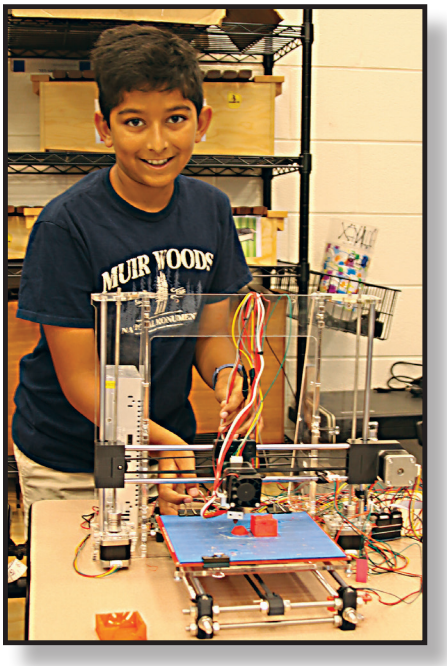
Passport to the World: Explore the rich diversity of cultures that inhabit our globe as you travel the world. Examine cultural differences and similarities. Gain a greater appreciation and understanding of humanity. *(K-4)*

Project-Based Engineering: Explore basic principles of physics, and structural and mechanical engineering. Invent, design, build and test your models. Experiment with various materials and theories to discover how to make your models operate most efficiently. *(K-5; $10 lab fee)*

Put On a Musical: Do you love to sing and perform? Or is musical theater new to you? Have a great time with your classmates as you act, sing, and even dance (if you want to) to put together an abridged version of a popular musical. Will you be ready for your live performance for family and friends on the last day of class? *(K-7)*

Put On a Musical Review: Do you love to sing and perform? Or are musicals new to you? Sing funny songs or dramatic songs and have a great time with your classmates as you act, sing, and even dance (if you want to). Working with group and solo material, learn songs and how to understand and convey their meaning. Perform for family and friends on the last day of class. *(K-7)*

Readers Theater: A unique opportunity for readers, writers, and/or actors! Have great fun doing a play, and not having to memorize anything! All literature breathes new life when read aloud, but when vocal expression—even of the character descriptions, movement, costumes, narration, and settings— is the only means used to help the audience understand the story in a play, the quality of drama coming forth from the stage is singular and wonderful! *(4-7)*



Scientific Shenanigans: Discover a fresh, creative approach to science. Explore physics, astronomy, nature, chemistry, and more; then expand and expound what you glean from your myriad hands-on projects and experiments by creating and acting in short science plays. *(K-2)*

Short Stories: Everyone loves stories! What are your favorites? Explore a wide range of genres, such as adventure, fantasy, science fiction, biographical fiction, and fanfiction. Inspired by your new understanding and discovery, create short stories of your own . *(3-7)*

Snap! Crackle! Pop! Chemistry: Mix, swish, and create chemical concoctions that pop, fizz, crackle, snap, and maybe even explode, as you explore chemistry via hands-on experiments. *(K-2)*

Stock Market and Economics: Do you like money? Do you know how the stock market works? How to make your money grow? How companies make money? Follow the stock market and investigate how and why some businesses are successful, and some are not. *(3-7)*

The Knots Have it! Ever thought about competing on Survivor? The competitors have to build shelters and, in many challenges, their ability to tie and untie knots quickly and effectively is rather imperative. This class is all about knots! *(3-7)*

Ukulele: Strings, Chords, and More: Ever want to learn to play the ukulele? Now you can! This fun class will teach you the basics. Learn chords and even play songs. Perform for family and friends on the last day. ***Ukulele required. Bring your own or purchase a Makala Dolphin Bridge ukulele for $59.95 by paying online when you apply and receiving the ukulele the first day of class.*** *(1-5)*

Writing and Art: Express your ideas through your favorite genres, such as short stories, fractured fairy tales, free verse poetry, imagery, rhymes, haiku . . . you choose! Then discover how to enhance and enrich your writing with one-of-a-kind art. *(3-7)*

Zoology: Discover the wonders of the animal kingdom! Study the habitats, habits, and characteristics of living and extinct species around the world. *(K-3)*

For students entering grades PK-K

All courses below are offered both mornings and afternoons. Students enjoy a 160-minute interdisciplinary classroom experience each half day. For each of the three Sessions at Lincolnshire, two of the following courses will be offered:

Amazing Dinosaurs: How did dinosaurs live? What was their world like? Through creative, interdisciplinary activities, step back in time to explore the lives of dinosaurs, from the large brachiosaurus to the small compsognathus, from the swift ornithomimus to the slow stegosaurus.

Happy Fourth of July! Why is the Fourth of July a holiday? What is the Declaration of Independence? Investigate the history behind all the noise and festivities. Celebrate the 242nd birthday of the USA with all things red, white, and blue.

Mad Scientists Loose in the Kitchen! Discover the amazing chemical phenomena happening in your pantries and refrigerators right now. Explore sundry science through hands-on experiments.

Ocean Explorers: Sail the ocean blue! Visit islands around the globe, investigate tidal pools, scuba dive around coral reefs, and discover the briny deep, through imaginative interdisciplinary activities.

Space Explorers: Blast off, astronauts, to an astronomically fun, factual, and fantastic exploration of the universe! Discover the wonders of outer space through simulations and model constructions in this stellar course.

Stories and Art: The Caldecott Winners: Why is a book a Caldecott winner? How does the art express the story? How does the story inspire the art? What do you think of the stories and illustrations? Explore artistic styles found in the superbly illustrated winners of the Caldecott Medal and create your own illustrations.

Location

Half Day School
239 Olde Half Day Road, Lincolnshire

Hours

Full Day: 9:00-3:00
Morning: 9:00-11:40
Afternoon: 12:20-3:00
Extended Care: 7:30-9:00, 3:00-6:00

Tuition

Session I
Full Day: $352
Half Day: $176

Session II
Full Day: $440
Half Day: $220

Session III
Full Day: $880
Half Day: $440

Fees for Sessions I, II, and III

Processing fee: $4.20
A.M. Extended Care: $15 per day
P.M. Extended Care: $10 per hour
Lab fees: As indicated in course descriptions

See "Details" link on our website for more information on all programs, including program structure, application, placement, eligibility, refunds, etc.

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