



THE LONG ISLAND UNIVERSITY CENTER FOR GIFTED YOUTH
College of Education, Information and Technology
720 Northern Boulevard
Brookville, New York 11548-1300

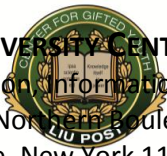
CGY SUMMER 2016



JULY 5 – JULY 29, 2016

Dr. Lynne Manouvrier, Director
Mr. Henry Mazer, Headmaster

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SUMMER 2016
REGISTRATION MATERIALS
July 5- July 29, 2016

Office: (516) 299-2160

Email: vera.savino@liu.edu

Fax: (516) 299-3323

Web Site: www.liu.edu/post/giftedyouth

EMERGENCY CLOSING PROCEDURE

The Center for Gifted Youth operates under the auspices of Long Island University. Therefore, the Center is not responsible for program closings due to inclement weather or other university emergencies.

TUITION, DEPOSIT, AND FEES

Academic tuition for the summer program is **\$3,150.00**. The lunch program is **\$200.00** for a total program cost of **\$3,350.00**. A laboratory fee of **\$30.00** per course will also be charged for students enrolled in science classes. The tuition includes a **\$1,500.00 non-refundable** deposit to be paid when you register your child (registration materials are included).

REFUND POLICY

- The **\$1,500 deposit** is non-refundable.
- The only circumstance in which the **deposit** will be refunded is if the student becomes seriously ill before the start of the semester and a doctor's note is provided.
- If you wish to withdraw your child from the Center for Gifted Youth prior to the start of the semester, the **tuition balance**, not including the **deposit**, may be refunded.
- All withdrawal requests must be made in writing.
- Assignment to any course chosen by your child on the registration form commits her/him to attend. Therefore, choose only courses that will be suitable for your child.
- **Once the semester has started, there will be no refunds.**
- Under no circumstances will **deposit** or **tuition** payments be applied to another student or another semester.

TRANSPORTATION

Call the office for more info-516-299-2160

LUNCH



Students will be provided a healthy lunch at the Hillwood Commons Cafeteria.

****If your child has any severe allergies and/or allergic reactions, please provide your own lunch.***

Lunch Program

As part of the tuition, students will be served a nutritious lunch from the Hillwood Commons Cafeteria. Following lunch, a brief recess is provided. During the lunch and recess times students are given opportunities to socialize with friends and to meet new people.



Recreation and Arts Program

In an effort to achieve a healthy balance between the academic and social aspects of the summer program, recreation and arts have been woven into the daily student activities. A recreation program including indoor and outdoor activities is provided daily. A creative arts program also is offered during this recreation time. Special events such as a carnival and Team Olympics highlight the program.



July 5-July 29, 2016

Students in grade 6 may choose courses for either grade levels 4-6 or 6-8 without being confined to either age group.

PERIOD 1

Grades 2-3

9:15 - 10:10 a.m.

- Computer Animation: Programming to Create Digital Creations
- Our Dynamic Earth

PERIOD 2

10:20 - 11:15 a.m.

- Computer Animation: Programming to Create Digital Creations
- Our Dynamic Earth

11:20 a.m. - 12:15 p.m.

Lunch & Outdoor Recess

PERIOD 3

12:20 - 1:15 p.m.

- Archaeology: What is Past is Present*
- Math and Architecture: Why Do Buildings Stand Up?

PERIOD 4

1:25 - 2:20 p.m.

- Archaeology: What is Past is Present*
- Math and Architecture: Why Do Buildings Stand Up?

2:30 - 3:30 p.m. Recreation

PERIOD 1

9:15 - 10:10 a.m.

- Chemistry: Selected Topics*
- Events and Ideas that Changed the World
- Rocketry and Airplane Design*

PERIOD 2

10:20 - 11:15 a.m.

- Computer Robotics*
- Finding Your Global Voice with World Water
- Performing Arts: History, Critical Theory and Application

11:20 a.m. - 12:15 p.m.

Lunch & Outdoor Recess

PERIOD 3

12:20 - 1:15 p.m.

- Entrepreneurship: Create Your Own American Dream
- Rocketry and Airplane Design*
- Zoology*

PERIOD 4

1:25 - 2:20 p.m.

- Electrical Circuits and Electronics*
- Paper Geometry
- Writing Humorous Stories

2:30 - 3:30 p.m. Recreation



PERIOD 1

9:15 - 10:10 a.m.

- Imagination: Good, Better, Best*
- Performing Arts: History, Critical Theory and Application

PERIOD 2

10:20 - 11:15 a.m.

- Advanced Rocketry*
- New Frontiers in Chemistry*

11:20 a.m. - 12:15 p.m.

Lunch & Outdoor Recess

PERIOD 3

12:20 - 1:15 p.m.

- Match Wits with Mensa
- Writer's Workshop: Mystery Writing

PERIOD 4

1:25 - 2:20 p.m.

- Advanced Zoology*
- Entrepreneurship: Re-invent the World through Microcredit and Microfinance

2:30 - 3:30 p.m. Recreation

Grades 4-6

Grades 6-8

*** A lab fee of \$30 per science class will be charged for any student taking science classes.**

****Courses subject to change**

SUMMER 2016 COURSE DESCRIPTIONS

Grades 2-3

Students in grades 2 and 3 will be assigned to the following four courses during each day:

ARCHAEOLOGY: WHAT IS PAST IS PRESENT



An archaeologist is a combination of detective and historian. Students will examine artifacts discovered on campus and learn about the relationship between the artifact and the culture that produced it. Students will learn about earlier and ancient cultures as well. As part of the course, students will participate in a simulated surface dig.

COMPUTER ANIMATION: PROGRAMMING TO DEVELOP DIGITAL CREATIONS

Children will learn to master four iPad applications: LEGO Movie Maker, MyStopAction, Explain Everything and Move the Turtle. Children will become familiar with all four programs, gaining technological finesse with an iPad. They will apply their knowledge of the skills they learn by making projects in class. They will learn to think creatively, problem solve, reach solutions to challenges, synthesize new technological skills and demonstrate their learning and thinking using computer animation. Finally, students will present, assess and evaluate their projects.

MATHEMATICS AND ARCHITECTURE: WHY DO BUILDINGS STAND UP?

How are ideas in mathematics related to architecture? The design of most major architectural projects is dependent upon laws and principles of mathematics. This course will explore how the combination of architecture, numbers, and shapes helps buildings to stand up. Students will have an opportunity to develop individual architectural projects.

OUR DYNAMIC EARTH

The emphasis of this curriculum is Earth Science. Children's curiosity will be stimulated as they learn about the most fundamental natural occurrences. Children will participate in activities that will expand their understanding of the earth, minerals, water, and weather.

SUMMER 2016 COURSE DESCRIPTIONS

Grades 4-6

Students in grades 4-6 choose four courses during each day. Students in grade 6 may choose courses for either grade levels 4-6 or 6-8 without being confined to either age group.

MATHEMATICS & COMPUTERS

COMPUTER ROBOTICS

Robotics is the field of the future. Using gizmos and gadgets, students will develop and evaluate their own ideas in a project creation environment. Students will learn not only the specifics of using machines to accomplish real tasks, but also the general practice of working in partnership with technology. The software is a collection of tools that build on the tradition of Logo and LogoWriter. This software enhances creativity, problem-solving and critical thinking skills. Students who enroll in this course should have a strong background in computers.



PAPER GEOMETRY

Geometry is the study of relationships. Student activities will provide the opportunity to explore these relationships through drawing, building and exploring polygons, tessellations and polyhedrons. Students will be engaged through constructions and research to find solutions to problems presented. They will problem solve situations in a team environment and be provided the opportunity to explore and discover geometric concepts.

SCIENCE

CHEMISTRY: SELECTED TOPICS

This course is designed to engage the youngster who has had minimal experience in the study of chemistry. Activities and discussions will be drawn from topics such as matter and its classification, phases and phase changes, physical and chemical properties, chemical changes and reactions, and the interactions of energy and matter. In each instance, the objectives are to enable students to "discover" some basic chemical concepts and principles, become familiar with standard laboratory techniques, and experience the excitement and enjoyment of scientific inquiry. Laboratory activities will be carefully supervised and safety procedures emphasized.

ELECTRICAL CIRCUITS & ELECTRONICS

Students will begin to investigate the basic facts, concepts and principles of direct and alternating current circuits. They will explore various parameters of Ohm's Law, which include series and parallel circuits, and examine more complicated electric components. Other areas to be studied will include the nature of various kinds of electro-magnetic waves and the equipment used to study this phenomenon. This will include transformers, spectrometers, lasers, and diodes. The basic principles behind the operation of TV sets will be discussed and developed. Safety practices and procedures will be required and stressed throughout the program. No previous background in electronics is required.

ROCKETRY & AIRPLANE DESIGN

Students will investigate the evolution of rocket and airplane design from the first Chinese fireworks, to the Boeing 777, to the Space Shuttle. After investigating the principles of flight, students will design, build and launch model rockets and airplanes. Students with experience will work on more advanced models. This hands-on program stresses theory, design, construction and the importance of teamwork in building and launching rockets. Safety procedures will be stressed throughout the program.

ZOOLOGY

In this course, students will explore the wonderful world of animals. All the major animal phyla will be examined. Modern nomenclature will be introduced. Hands-on activities will include observations of live and preserved specimens from various groups. Special emphasis will be placed on endangered species and their importance to the major biomes of the world.

HUMANITIES



ENTREPRENEURSHIP: CREATE YOUR OWN AMERICAN DREAM

Throughout this stimulating course, students will research and debate the idea of the American Dream, and how it relates to social justice and individual potential. Historically, entrepreneurs have been seen as self-taught, self-made individualists. Collaboratively, students will research various giants of industry from the past and present to analyze and synthesize how these entrepreneurs created their own American Dream regardless of social order and position. Activities will include students working collaboratively to create microcredit organizations to benefit society as a whole. Individually and within groups, scaffold activities will allow students to synthesize and apply their research to generate multi-media presentations to market and advertise their product and organization.

EVENTS AND IDEAS THAT CHANGED THE WORLD

This course will explore events and ideas that altered the course of history. We will examine and trace the course of humankind from ancient times until the dawn of the modern age. Milestones of history such as the development of democracy, rise and fall of empires, spread of religion, growth of business and trade, renaissance and revolution will be viewed in depth. Events and ideas of the past will be brought to life through original reading, simulations of historical events, debates, and the exploration of the arts, literature and music of earlier times.

FINDING YOUR GLOBAL VOICE WITH WATER

Water, water, everywhere... But not a drop to drink. If all of the world's water were fit into a gallon jug, the fresh water available for us to use would equal only about one tablespoon. Why do some people have access to clean drinking water while others do not? In this enjoyable and intriguing course, students will research and evaluate the world water crisis, analyze their own water use, and develop a firsthand, deep understanding about the importance of conserving water. Students will research the challenges of water waste faced by affluent countries such as North America and Europe, and compare them to those of real people in developing countries around the world. Through challenging and creative activities, students will present and evaluate how access to clean water is connected to human rights, social justice, poverty and hunger, the environment, and public health.

PERFORMING ARTS: HISTORY, CRITICAL THEORY AND APPLICATION

This course will utilize two Broadway productions, *Les Misérables* and *Newsies*, as a focus for critical analysis and an exploration of political and societal influences in Europe and the United States from 1832-1899. Studies will include attendance at a live professional performance, development of theatre skills and will culminate in a student performance event. All participants in this course will perform in and/or co-design elements of the CGY summer musical.

WRITING HUMOROUS STORIES

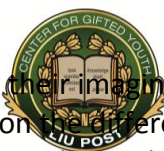
Have some serious fun retelling favorite stories with a new twist. Stand familiar expressions on their heads. Write silly rhymes. Create arguments that blow themselves up! We'll have a good time and challenge our wit by writing stories, essays, and verses that will tickle your funny bone.

GRADES 6-8

MATHEMATICS & COMPUTERS

IMAGINATION: GOOD, BETTER, BEST

This new course encourages students to develop their imagination in order to function in positive ways in school and in future life. The curriculum focuses on the differences between convergent and divergent thinking and using the imagination to think inside and outside of the box, both in school and in the student's future. The class will use Ning, an online social platform, for sharing activities, resources, and responses to help develop the imagination.



MATH: MATCH WITS WITH MENSA

When we think critically, we are engaging in strategies to probe the nature of the puzzle or game. This is accomplished by observation, generalization, deductive reasoning, establishing relationships, and developing sequences and patterns. Students will be challenged by mathematical puzzles and games from the Mensa Society. This will encourage children to be inventive, creative and artistic. Students will be inspired to embrace the unknown, while solving challenging puzzles at their level.

SCIENCE

NEW FRONTIERS IN CHEMISTRY

This course is designed to give students an opportunity to participate in exploratory activities in the areas of stoichiometry, kinetics, equilibrium, acid-based equilibrium, chemical bonding, chemical thermodynamics, and electrochemistry. Students will investigate problems of interest to them, using the procedures and concepts learned through earlier activities. Proper chemistry laboratory skills and techniques will be stressed.

ADVANCED ROCKETRY

This course will be a study of the exploration of space, including aerodynamic principles and rocket propulsion. Students will build and launch multi-stage rockets and use triangulation techniques to ascertain altitudes. Experienced rocketeers will be given more advanced projects and will discuss and develop selected aspects of projectile motion. Safety procedures and rules will be stressed throughout the program.

ADVANCED ZOOLOGY

Students will use the modern system of classification to develop an understanding of how all animals are related to each other. Investigating the similarities and differences among various animals will be the major focus of this course. The comparative anatomy of representative organisms will be stressed by having the students participate in the detailed study of both live and preserved specimens. In addition, the interaction of these organisms with their environment will be emphasized.

HUMANITIES

ENTREPRENUERSHIP: RE-INVENT THE WORLD THROUGH MICROCREDIT AND MICROFINANCE

The world today is always being re-invented. This exciting course delves into the resources creativity within students to become entrepreneurs! Individually and in collaborative groups, students will research various leaders of industry from the past like Rockefeller, Carnegie, and Vanderbilt to the leaders of today-Bill Gates, Michael Dell, and Google's Larry Page and Eric Schmidt through multiple modalities. They will learn about how



these entrepreneurs recognized opportunity, harnessed their resources to exploit that opportunity, and exercised their creativity to create sustainable solutions. Students will create an original product or idea which has a needed value in our society, and critically integrate and synthesize their research to generate a business plan for their product. Students will market and advertise their product within an original documentary of Moviemaker presentation.

PERFORMING ARTS: HISTORY, CRITICAL THEORY AND APPLICATION

This course will utilize two Broadway productions, *Les Misérables* and *Newsies*, as a focus for critical analysis and an exploration of political and societal influences in Europe and the United States from 1832-1899. Studies will include attendance at a live professional performance, development of theatre skills and will culminate in a student performance event. All participants in this course will perform in and/or co-design elements of the CGY summer musical.

WRITER'S WORKSHOP: MYSTERY WRITING

The mystery stories of Edgar Allen Poe, Sherlock Holmes and Agatha Christie have intrigued readers for many years. This course will help students understand the essential ingredients for writing a good mystery. The elements of plot, character, and action will be discussed. Students will have the opportunity to create their own portfolio of mysteries.