

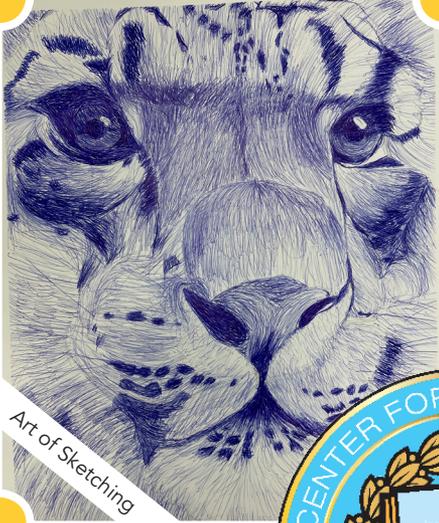


LONG ISLAND UNIVERSITY

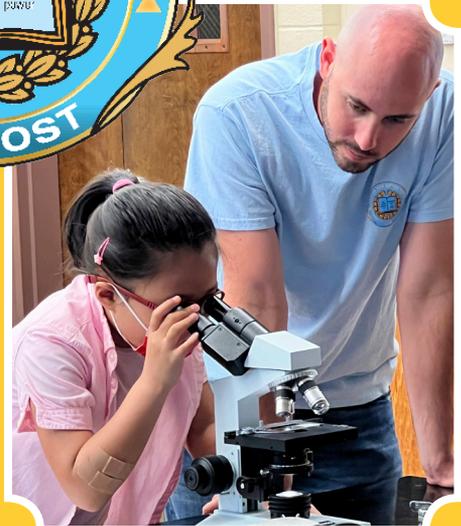
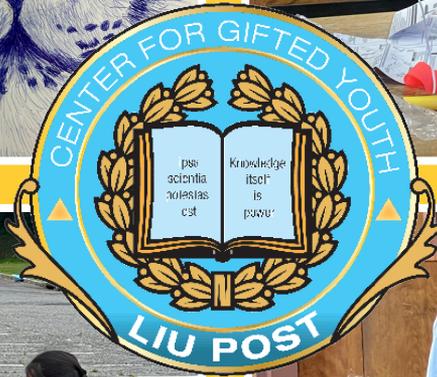
# CENTER FOR GIFTED YOUTH

FALL 2022 PROGRAM

OCTOBER 8 – DECEMBER 17, 2022



Art of Sketching



# CENTER FOR GIFTED YOUTH FALL 2022

October 8 - December 17, 2022

*Kindergarten to Grade 9*

## LONG ISLAND UNIVERSITY AND THE GIFTED CHILD

The Long Island University (LIU) program for gifted children was established in 1980 in response to the increasing recognition of society's special responsibilities for children with demonstrably superior intellectual ability.

The LIU Center for Gifted Youth brings together two important elements of education for the gifted: extraordinary teachers recruited from leading high schools, middle schools, and elementary schools in the metropolitan area; and university-level facilities. These two factors, combined with an administrative and psychological team schooled in the needs of gifted children, give the program at LIU Post unique strengths in producing positive benefits for young people admitted to the program.

The Center for Gifted Youth's underlying philosophy is the development of the intellectual potential of each child. Its purpose is to provide learning experiences for children with superior intellectual ability that will deepen and extend their intellectual interests, as well as develop the skills of independent learning.

Cover: Sketching by Neil Marantz, 7th Grade



**LONG ISLAND UNIVERSITY**

**CENTER FOR GIFTED YOUTH**

**Dr. Lynne Manouvrier, Director and Associate Dean**

**Dr. Rita Langdon, Dean**

**Long Island University | LIU Post**

**720 Northern Boulevard, Brookville New York 11548-1300**

**Registration Appointments: (516) 299-2580 | [GiftedYouth@liu.edu](mailto:GiftedYouth@liu.edu)**

**[www.liu.edu/giftedyouth](http://www.liu.edu/giftedyouth)**



# FALL SEMESTER 2022

## ELIGIBILITY

Students accepted to the Long Island University Center for Gifted Youth entering grades K through 9 in September 2022 are eligible. Enrollment is limited.

## OBJECTIVES OF THE CENTER FOR GIFTED YOUTH

1. To provide opportunities for gifted students to relate to each other intellectually and socially
2. To provide activities at appropriate levels and pace
3. To maximize problem solving and creative thinking experiences
4. To focus on leadership development
5. To increase self-awareness by promoting realization and acceptance of one's capacities and an understanding of one's needs and interests
6. To stimulate aspirations and pursuit of higher-level goals
7. To provide exposure to, and interaction with, stimulating and interesting adults

## TECHNOLOGY INFUSION

For gifted students, learning presents unique challenges. To ensure that students in the Center for Gifted Youth are well prepared for these challenges, we provide a technology-rich environment. Among these resources are media tools, including net books, iPads, Smart Boards and Artificial Intelligence Laboratories. Many courses will be Internet-based and include such applications as a customized Google search tool, graphing calculators, and software animation programs from MIT. Our goal is to infuse technology within the framework of our program in order to provide a more challenging, meaningful, and appropriate educational experiences for our gifted students, preparing them for diverse leadership roles in the 21st century.

## THE ROLE OF PARENTS

The Center for Gifted Youth is acutely aware of the role parents take in the success of their children. To help parents with this task, a number of services are offered. Parents may enroll in a variety of workshops scheduled to run concurrently with their child's classes. The Center for Gifted Youth's director leads workshops designed to allow an exchange of information and perceptions about the responsibilities, challenges, and joys of raising gifted children. Past meetings have included such topics as the social and emotional factors of being gifted, school challenges, sibling rivalry, and enrichment alternatives. Participation in all workshops and meetings is voluntary and provided at no extra fee. We have a recommended psychologist who may be available to discuss specific concerns. Classroom observations by the headmaster, director and dean, and input from the instructional staff are useful parts of this process.

## GIFTED PARENT NETWORK

The mission of the Gifted Parent Network is to facilitate a social and informational network for families participating in programs at the Center for Gifted Youth. The goals include encouraging social interactions between families and providing a forum for sharing experiences and challenges.

## BACKGROUND INFORMATION

The Long Island University Center for Gifted Youth (LIUCGY) offers its program at the LIU Post campus on Saturday mornings each fall and spring. Classes commence at 9:00 a.m. and conclude at 11:55 a.m. Classes in the kindergarten through grade one level remain together throughout the morning.

Beginning in second grade, students select three courses offered at their level in the appropriate time frame. The curriculum involves children in interdisciplinary approaches to the physical and life sciences, mathematical problem solving, computers and the Humanities. Parents are invited to participate in special parent group discussions led by the leadership of the Center.

## ENTRANCE REQUIREMENTS

The Center admits children who have shown evidence of academic and intellectual promise. While guidelines are not fixed, gifted children are usually identified by high scores on standardized I.Q. tests, strong personal interests and superior school performance. Students accepted into the program in past semesters have usually shared most or all of the following characteristics: scores of 130 or higher on I.Q. tests, high scores on achievement tests, and exceptional school performance (pupils in grade 4 through 8 are generally working a minimum of two years above grade level). In addition to the above criteria, recommendations indicating the degree of the child's social and emotional maturity are required for all applicants.

## APPLICATION PROCEDURES

New students are accepted into the Center throughout the year for entry the following semester. Applications on behalf of students may be made directly by parents, as well as by elementary and middle schools. Appropriate forms are provided within this brochure. Due to the limited number of openings for new students, as well as the time it takes to review applications, parents are urged to apply as soon as possible before the start of a new term.

# APPLICATION PROCESS

Applications will be reviewed by the admission committee when all of the following materials have been received:

## FORM 1: ENTRANCE APPLICATION

A completed application form (to be filled out by the child's parent or legal guardian).

## FORM 2: SCHOOL RECOMMENDATION

A recommendation by the principal or guidance counselor of the applicant's school including the results of standardized intelligence and achievement tests. Parents must notify schools of their permission to release these scores.

## FORM 3: TEACHER RECOMMENDATION

A recommendation by the applicant's teacher or appropriate school guidance counselor. We require a brief narrative focusing on the child's social and emotional maturity, as well as the child's classroom performance.

## FORM 4: APPLICATION PAYMENT FORM

A non-refundable \$30 application fee must be submitted with the application. Checks should be made out to "LONG ISLAND UNIVERSITY" and include the applicant's name at the bottom.

**FORMS 1, 2, 3** and **4** should be mailed directly to the Center's office:

Long Island University  
School of Professional Studies  
Center for Gifted Youth  
720 Northern Boulevard  
Brookville, New York 11548-1300

Parents will be notified by mail or email as to whether their child has been accepted into the program. If accepted, registration materials will follow. Parents of accepted students need not re-apply for admission to the Center for subsequent semesters.

## EMERGENCY CLOSING PROCEDURES

The Center for Gifted Youth operates under the auspices of LIU Post. Therefore, the Center is not responsible for program closing due to inclement weather or other university emergencies. Emergency information will be posted at [www.liu.edu/post](http://www.liu.edu/post).

## TUITION, DEPOSIT, AND FEES

Academic tuition is \$2,200 for the Fall program. A laboratory fee of \$50 per course will be charged for students enrolled in science classes. The tuition and fees are due upon registration.

## REGISTRATION PROCEDURES FOR ACCEPTED STUDENTS

Once a child is accepted into the Center for Gifted Youth, parents will receive additional registration materials, as well as other information concerning tuition payment and schedules. **Registration is separate for each semester and is based on a first-come, first-served basis.** Enrollment in our classes is limited in order to maximize learning opportunities for each student. As soon as a course is filled, it will be closed. We cannot guarantee placement. **In order to avoid disappointment, it is advisable to register early.** Course selection will be approved by the director. Students are the guests of LIU Post while participating in the gifted youth program and are expected to act appropriately. Misconduct may result in removal from the program.

## REFUND POLICY

- The only circumstance in which the tuition will be refunded is if the student becomes seriously ill before the start of the semester and a doctor's note is provided.
- 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.
- All withdrawal requests must be made in writing.
- Under no circumstances will tuition payments be applied to another student.
- **Once the semester has started, there will be no refunds.**

**ENTRANCE APPLICATION**  
**FOR THE LONG ISLAND UNIVERSITY**  
**CENTER FOR GIFTED YOUTH**

**RETURN TO:**

Long Island University  
School of Professional Studies  
Center for Gifted Youth  
720 Northern Boulevard  
Brookville, New York 11548-1300

**PLEASE CHECK**

- Fall Program 2022  
 Spring Program 2023  
 Siblings in Program

**INSTRUCTIONS TO THE PARENT:**

This questionnaire should be filled out promptly and returned to the Center with the required **\$30 non-refundable application fee**. **Checks should be made out to "Long Island University."**

Two recommendation forms are enclosed; one is for the school principal and one for a recent teacher or guidance counselor. Once completed, these forms are to be forwarded directly to the Center for Gifted Youth office. Candidates should provide the school with a stamped envelope addressed to the above.

PLEASE NOTE: **THIS IS NOT A REGISTRATION FORM**. This application form is for entrance into the program. If your child is accepted, a separate registration form will be mailed or emailed to you along with an acceptance letter. Students who have already been accepted need not reapply. We will also have in-person registration appointments and appointments through Zoom or phone.

**APPLICATION FORM** (PLEASE PRINT CLEARLY)

**NAME** \_\_\_\_\_  
(LAST) (FIRST) (MIDDLE)

**SEX** \_\_\_\_\_ **DATE OF BIRTH** \_\_\_\_\_ **PRESENT GRADE** \_\_\_\_\_

**ADDRESS OF CANDIDATE**

**STREET** \_\_\_\_\_

**CITY** \_\_\_\_\_ **STATE** \_\_\_\_\_ **ZIP** \_\_\_\_\_

**HOME PHONE NUMBER** (including area code) \_\_\_\_\_

**FATHER'S CELL PHONE** (including area code) \_\_\_\_\_

**MOTHER'S CELL PHONE** (including area code) \_\_\_\_\_

**FATHER'S BUSINESS PHONE** (including area code) \_\_\_\_\_

**MOTHER'S BUSINESS PHONE** (including area code) \_\_\_\_\_

**EMAIL ADDRESS** \_\_\_\_\_

**NAMES AND OCCUPATIONS OF PARENTS**

*(please include last name if different from candidate)*

FATHER \_\_\_\_\_ OCCUPATION \_\_\_\_\_

MOTHER \_\_\_\_\_ OCCUPATION \_\_\_\_\_

**How did you learn about this program?** (If website, please specify name.)

---

---

---

---

**Does your child have any unique interests or abilities?** (If yes, please explain)

---

---

---

---

**Have you applied for this child before?** \_\_\_\_\_

**NAME OF PRESENT SCHOOL** \_\_\_\_\_

**ADDRESS (STREET)** \_\_\_\_\_

**CITY** \_\_\_\_\_ **STATE** \_\_\_\_\_ **ZIP** \_\_\_\_\_

**SCHOOL TELEPHONE NUMBER** (including area code) \_\_\_\_\_

**SIBLINGS IN THE PROGRAM** (if any) \_\_\_\_\_

---

---

**DATE**

**SIGNATURE OF PARENT OR GUARDIAN**

SCHOOL RECOMMENDATION FOR  
THE LONG ISLAND UNIVERSITY  
CENTER FOR GIFTED YOUTH

**RETURN TO:**

Long Island University  
School of Professional Studies  
Center for Gifted Youth  
720 Northern Boulevard  
Brookville, New York 11548-1300

This form should be filled out by the **principal** of the child's present school, and the completed form should be mailed by him or her directly to the Center in a stamped, addressed envelope provided by the parent. Please attach a copy of the candidate's latest report card to this form.

*(PLEASE PRINT)*

**CANDIDATE'S NAME** \_\_\_\_\_  
(LAST) (FIRST) (MIDDLE)

**CANDIDATE'S ADDRESS** \_\_\_\_\_

**CANDIDATE'S PHONE NUMBER** \_\_\_\_\_

This candidate has been a student of the \_\_\_\_\_ School,  
located at \_\_\_\_\_  
(STREET ADDRESS) (CITY) (STATE) (ZIP)

from \_\_\_\_\_ to \_\_\_\_\_.

**Grade level as of Sept. 2022** \_\_\_\_\_

**School Telephone Number** \_\_\_\_\_

This is a program for gifted children. As the name implies, it is for children with noticeable academic and intellectual promise. While guidelines are not fixed, gifted children are usually identified by high scores on standardized I.Q. tests, strong personal interests, and superior school performance. Students accepted into the program in past semesters have usually shared most or all of the following characteristics: **scores of 130 or more on I.Q. tests, high scores on achievement tests, and exceptional school performance** (e.g., pupils in grades 4 and higher are generally working a minimum of two years above grade level). As we do not wish to place a child in a group in which he/she cannot cope, we welcome your comments.

**TEST RESULTS  
INTELLIGENCE:**

INDIVIDUAL TESTS	Test Date	Scores					
		VCI	VSI	FRI	WMI	PSI	FSIQ
WISC-V							
WPPSI-IV		VCI	VSI	FRI	WMI	PSI	FSIQ
Stanford-Binet V		FR	KN	QR	VS	WM	FS
Stanford-Binet IV		VR	AVR	QR	STM	COMP	
GROUP TESTS	Test Date	Scores					
Cognitive Abilities Test (COGAT)		V	Q	NV	Total		
Otis-Lennon		V		NV	Total		
Other (Name)							

**Note: We do not accept brief or abbreviated assessment measures, e.g., VKT, Slosson, WASI, etc.**

**ACHIEVEMENT – MATHEMATICS:**

	Test Date	NATIONAL				LOCAL
		%	Stanine	%	Stanine	Level
Iowa Test of Basic Skills						N/A
NYS Math (Grade 4)		N/A	N/A	N/A	N/A	
Terra Nova						N/A
TONYSS						N/A
Other (Name)						N/A

**ACHIEVEMENT – READING:**

	Test Date	NATIONAL				LOCAL
		%	Stanine	%	Stanine	Level
Iowa Test of Basic Skills						N/A
ELA (Grade 4)		N/A	N/A	N/A	N/A	
Terra Nova						N/A
TONYSS						N/A
Other (Name)						N/A

**Personal Evaluation**

1. Student is \_\_\_\_\_ is not \_\_\_\_\_ mature and well adjusted.

2. As a student (circle one) Outstanding      Above Average      Average

Additional Comments: \_\_\_\_\_

Date \_\_\_\_\_ Signature \_\_\_\_\_

Print Name \_\_\_\_\_ Title \_\_\_\_\_

TEACHER RECOMMENDATION FOR  
THE LONG ISLAND UNIVERSITY  
CENTER FOR GIFTED YOUTH

**RETURN TO:**

Long Island University  
School of Professional Studies  
Center for Gifted Youth  
720 Northern Boulevard  
Brookville, New York 11548-1300

Both sides of this form are to be completed by a **recent teacher** or **guidance counselor** who knows the candidate well. Please return directly to the Center in a stamped envelope provided by the parent.

(PLEASE PRINT)

CANDIDATE'S NAME \_\_\_\_\_  
(LAST) (FIRST) (MIDDLE)

CANDIDATE'S ADDRESS \_\_\_\_\_

CANDIDATE'S PHONE NUMBER \_\_\_\_\_

Please rate the candidate in the categories listed below.

**Categories that are rated "deficient" by the teacher should be accompanied by a brief explanation on the reverse side of this page.**

	Outstanding	High	Average	Below Average	Deficient
1. Prefers complex ideas	_____	_____	_____	_____	_____
2. Asks penetrating questions	_____	_____	_____	_____	_____
3. Vocabulary	_____	_____	_____	_____	_____
4. Originality	_____	_____	_____	_____	_____
5. Curiosity	_____	_____	_____	_____	_____
6. Motivation to learn	_____	_____	_____	_____	_____
7. Initiative	_____	_____	_____	_____	_____
8. Commitment to excellence	_____	_____	_____	_____	_____
9. Enthusiasm	_____	_____	_____	_____	_____
10. Sense of humor	_____	_____	_____	_____	_____
11. Attention span	_____	_____	_____	_____	_____
12. Perseverance & industry	_____	_____	_____	_____	_____
13. Emotional stability	_____	_____	_____	_____	_____
14. Social maturity	_____	_____	_____	_____	_____
15. Frustration tolerance	_____	_____	_____	_____	_____

This is a program for gifted children with noticeable academic and intellectual promise. While guidelines are not fixed, gifted children are usually identified by high scores on standardized I.Q. tests, strong personal interests and superior school performance. Students accepted into the program in past semesters have usually shared most or all of the following characteristics: **scores of 130 or more on I.Q. tests, high scores on achievement tests, and exceptional school performance** (e.g., pupils in grades 4 and higher are generally working a minimum of two years above grade level).

**For all applicants, we require a brief narrative emphasizing the child's social and emotional maturity, as well as an indication of the child's math and reading levels.**

As we do not wish to place a child in a group in which she/he cannot cope, we welcome your comments.

**Reading Level:**

---

---

---

**Math Level:**

---

---

---

**Social and Emotional Maturity:**

---

---

---

---

**Additional Comments:**

---

---

---

---

Candidate was in my class in \_\_\_\_\_ grade.

During the 20\_\_ - 20\_\_ School Year

Signature \_\_\_\_\_ Date \_\_\_\_\_

Title \_\_\_\_\_

School Address \_\_\_\_\_

School Telephone Number \_\_\_\_\_



## LABORATORY FEES

A laboratory fee of \$50 per science course will be charged to all students registered for science courses. These fees should be paid separately only after registration is confirmed and will be due at the same time as the tuition balance for that semester. Send no lab fees at this time.

## PAYMENTS

Please make all checks payable to: **LONG ISLAND UNIVERSITY.**

Be sure to include the full name of the student at the bottom of your check so that you will be credited correctly.

You may also pay by credit card (**MasterCard, VISA, AMEX or Discover**). Please email us at [giftedyouth@liu.edu](mailto:giftedyouth@liu.edu) or call the office at 516.299.2580 for this form.

Please note: Should LIU need to shift from onsite programming to an online format, we will notify parents and may issue a partial credit applicable for a future semester; Spring 2023 or Summer 2023 at the discretion of the administrative staff.

We require a signature, name of credit card, credit card number, expiration date, and CVV (3/4 numbers on the back of the card above your signature).

Mail all checks or credit card information with the completed payment form to:

Center for Gifted Youth  
School of Professional Studies  
Long Island University  
720 Northern Boulevard  
Brookville, NY 11548-1300

## GUIDELINES

**IMPORTANT:** Please mail forms directly to the Long Island University Center for Gifted Youth.

We encourage all grade 2-9 students to select courses from a variety of disciplines each semester. This is an opportunity to take subjects that are not typically offered during the regular school week. As students are not individually evaluated or tested in their classes, courses that are not in the child's area of strength should also be considered.

In order to ensure individual attention for each student, enrollment in our classes is limited. As soon as a course is filled, it will be closed. In order to avoid disappointment, it is advisable to register early.

## REGISTRATION POLICY

Students in Grades 2-9 should select, in priority order, three course choices for each hour. All registration appointments will be onsite or through Zoom. Please call Karen Young at 516-299-2580 to make an in-person registration appointment. Final selection of courses shall be approved by the Director.

**\*\*\*Should your child wish to be enrolled in a course with another child, a note signed by both parents must be attached to their registration forms.**

# FALL 2022 CLASS SCHEDULE

October 8 - December 17, 2022

## KINDERGARTEN - GRADE 1

9:00 - 11:55 a.m.

· Saturday Express: Science\*, Mathematics, Humanities

## GRADES 2-3

Period 1  
9:00 - 9:55 a.m.

· Investigations in Biological Science\*  
· Discover Ancient Egypt  
· Fundamentals in Coding with Java Script and Python\*

Period 2  
10:00 - 10:55 a.m.

· Discover Ancient Egypt  
· Mathematical Problem Solving  
· The World of Acrylic Painting (Beginner)

Period 3  
11:00 - 11:55 a.m.

· Investigations in Biological Science\*  
· Mathematical Problem Solving  
· Creative Writing (Beginner)

## GRADES 4-6

Period 1  
9:00 - 9:55 a.m.

· Arduino: Electronics and Computer Programming\* (Intermediate)  
· The World of Acrylic Painting (Intermediate)  
· Pioneers of Modern Physics\*  
· Biology: Ecology of Long Island\*

Period 2  
10:00 - 10:55 a.m.

· Arduino: Electronics and Computer Programming\* (Intermediate)  
· This Land is Your Land  
· Writing Your Great Adventure  
· Law and Entertainment

Period 3  
11:00 - 11:55 a.m.

· Writing Your Great Adventure  
· Engineering and Coding Using Micro:bit\*  
· Pioneers of Modern Physics\*  
· Biology: Ecology of Long Island\*

## GRADES 7-9

Period 1  
9:00 - 9:55 a.m.

· Let the Adventure Begin  
· This Land is Your Land  
· Legal Minds

Period 2  
10:00 - 10:55 a.m.

· Modern Quantum Mechanics\*  
· Video Game Design\*  
· Environmental Science: Emerging Energies\*

Period 3  
11:00 - 11:55 a.m.

· The World of Acrylic Painting (Advanced)  
· Arduino: Electronics and Computer Programming\* (Advanced)  
· Legal Minds

\*Indicates Science Fee (\$50)

# CENTER FOR GIFTED YOUTH

## FALL 2022 CALENDAR

Saturdays, 9 a.m. – 11:55 a.m.

*October 8*

*October 15*

*October 22*

*October 29*

*November 5*

*November 12*

*November 19*

*December 3*

*December 10*

*December 17*

### KINDERGARTEN GRADE 1

- Saturday Express: Math
- Saturday Express: Science\*
- Saturday Express: Humanities

### GRADES 2-3

- Investigations in Biological Science\*
- Fundamentals in Coding with Java Script and Python\*
- Creative Writing (Beginner)
- Discover Ancient Egypt
- The World of Acrylic Painting (Beginner)
- Mathematical Problem Solving

### GRADES 4-6

- Biology: Ecology of Long Island\*
- Engineering and Coding Using Micro:bit\*
- Arduino: Electronics and Computer Programming\* (Intermediate)
- Pioneers of Modern Physics\*
- Law and Entertainment
- Writing Your Great Adventure
- This Land is Your Land
- The World of Acrylic Painting (Intermediate)

### GRADES 7-9

- Environmental Science: Emerging Energies\*
- Modern Quantum Mechanics\*
- Video Game Design\*
- Arduino: Electronics and Computer Programming\* (Advanced)
- Let the Adventure Begin
- This Land is Your Land
- Legal Minds
- The World of Acrylic Painting (Advanced)

\*Lab fee of \$50 per science class will be charged for any student taking science classes.\*

# FALL 2022

## COURSE DESCRIPTIONS

October 8 - December 17, 2022

Please note that different topics are explored each semester (fall, spring, and summer), even though the course titles and academic areas may be similar.

### KINDERGARTEN AND GRADE 1

K-1 Saturday Express: Science\*, Mathematics, Humanities

The Saturday Express is a program of exploration and discovery in science, mathematics, and the Humanities. Students will be exposed to challenging ideas and concepts rarely introduced or explored at the early childhood level. They will be provided with hands-on learning experiences by expert instructors in their field at a depth and pace appropriate to gifted children.

### GRADES 2-3

Students in grades 2-3 will choose three of the following courses.  
See Class Schedule for the time of each course.

#### SCIENCE AND TECHNOLOGY

Investigations in Biological Science\*

This course is designed to provide a variety of learning experiences about living things. Students will conduct investigations that show how different plants and animals are able to carry out their activities and complete their life cycles. Selected topics on the human body and its dependence on plants and animals will be investigated. An understanding of the relationships between living things and the non-living world will be developed and explored. **New ideas are presented each semester. There are no prerequisites for this course.**

Fundamentals in Coding with JavaScript and Python\*

Computer coding is everywhere in today's world. In this case, students of any experience level will be challenged to improve their skill set. We will be exploring JavaScript and Python using visual programming tools (Karel the Dog and Tracy the Turtle) that the students can easily understand. We will explore generating art and music while the students learn the basic programming constructs. In addition, students will be introduced to Physical Computing using the BBC Micro:bit. Students will complete exercises and produce and present projects to their classmates.

#### HUMANITIES

Creating Writing (Beginner)

Students will be encouraged to write for pleasure through creative captions, storyboarding, writing song lyrics, collaborative poems, writing prompts and short stories. Children will choose writing pieces for inclusion into a class anthology.

\*Indicates a \$50 Science Fee

## Discover Ancient Egypt

Join us on an adventure to Ancient Egypt. This is an interactive course that allows students to learn the wonders of the fascinating ancient civilization that has impacted our current world. We will travel north up the Nile River, build a pyramid, study the Pharaohs, engage in a mummification, discover Egyptian gods, uncover fun facts and more. In addition, students will ask and answer questions about the seven wonders of Ancient Egypt.

## MATHEMATICS

### Mathematical Problem Solving

This course will focus on developing effective mathematical problem solving techniques. Students will learn to identify key words, find pertinent information, and select an appropriate strategy for solving problems. They will also learn to use diagrams, models and charts to organize information. Classroom lessons will include short presentations on the various techniques used in problem solving, followed by individualized, challenging exercises which will allow students to practice and improve their problem-solving abilities. Special care will be given to provide a variety of problems to meet the needs, interests, and abilities of each student.

## ART

### The World of Acrylic Painting (Beginner)

Like to paint? This is the course for you. Welcome to the World of Acrylic painting, an art world full of versatility and bright, bold colors. Develop painting skills, techniques, and aesthetic sensibilities related to artistic expression in the acrylic mediums. Emphasis on color and composition. Explore a lifelong passion or explore a new art medium! Surround yourself with students and artists who are as enthusiastic about learning and creating as you are. Take full advantage of the unique properties that acrylics offer and push the boundaries beyond their current artistic capabilities. We will investigate the master artists and painting movements from the past and present to help you improve your painting skills.

## GRADES 4-6

Students in grades 4-6 will choose three of the following courses.  
See Class Schedule for the time of each course.

## SCIENCE AND TECHNOLOGY

### Biology: The Ecology of Long Island\*

In this course, students will study and explore the chemical, biological, and geological aspects of Long Island. Students will study the ecology of Long Island starting with the foliage. Students will collect leaf samples from the trees on campus and then use technology to identify each specimen. Students will create a leaf collection, which they can take with them at the end of the semester.

### Engineering and Coding Using Micro:bit\*

In this course, students will extend computer programming to the physical world with creative projects. Students will design and build structures, mechanical contraptions, and robotic mechanisms using creative construction sets, motors and the micro:bit. The projects will combine engineering and programming in a fun and interactive way. No prior experience is required.

\*Indicates a \$50 Science Fee

### Arduino: Electronics and Computer Programming\* (Intermediate)

This workshop requires no experience in electronics or computer programming. You will learn how to build electronic circuits by connecting components using a breadboard and then connect and program an Arduino uno microcontroller to control lights, create sound, use sonar, control motors and servos, and read sensors like temperature. Students may bring their own laptop if available with free Arduino IDE installed. All other parts including Arduino will be provided. **This class is for those students who have not taken Arduino in spring or summer 2022.**

### Pioneers in Modern Physics\*

The course will investigate the works of Thomas Young, Michelson, and Marley. The contributions of Becquerel, Curie, and Roentgen to our understanding of Modern Physics and the atom will be studied. We will see the contributions and dilemmas proposed by such scientists as J.J. Thompson, E. Rutherford, A. Einstein, A. Compton, and N. Bohr.

## HUMANITIES

### Law and Entertainment

In this course, students will explore the interesting and proactive relationship between the rule of the law and entertainment. Students will appear as attorneys and witnesses as they role-play court cases involving Hollywood and its fascinating personalities. Proper trial techniques will be employed as students prepare for the ultimate drama of the courthouse.

### Writing Your Great Adventure

Students will read excerpts from C.S. Lewis, Ray Bradbury, O'Henry, Homer, and Robert Louis Stevenson in order to analyze exposition as well as elements of writer's craft in adventure stories. Students will examine the relationship of plot and characterization to irony and satire in order to analyze plot twists, humor and suspense in the genre of adventure. Following the workshop model of sharing, revising and editing, students will complete their own adventure stories.

### This Land is Your Land

This course will introduce students to global geographical issues. They will be immersed in decisions about migration patterns, where and why people and businesses settle in various locations, and how natural resources affect the economy both positively and negatively. Students will engage in simulations, interactive games and stock market research in order to understand the complexity of geography and its influence on the world. Student will make decisions on investing in stocks, buying real estate and relocating businesses.

## ART

### The World of Acrylic Painting (Intermediate)

Like to paint? This is the course for you. Welcome to the World of Acrylic painting, an art world full of versatility and bright, bold colors. Develop painting skills, techniques, and aesthetic sensibilities related to artistic expression in the acrylic mediums. Emphasis on color and composition. Explore a lifelong passion or explore a new art medium! Surround yourself with students and artists who are as enthusiastic about learning and creating as you are. Take full advantage of the unique properties that acrylics offer and push the boundaries beyond their current artistic capabilities. We will investigate the master artists and painting movements from the past and present to help you improve your painting skills.

\*Indicates a \$50 Science Fee

# GRADES 7-9

Students in grades 7-9 will choose of the following courses during the day.

See Class Schedule for the time of each course.

## SCIENCE AND TECHNOLOGY

### Environmental Science: Emerging Energies\*

In today's world, fossil fuels are becoming less abundant and often lead to environmental damage. Students will investigate and design new technologies to combat the rising problems associated with fossil fuel use. Students will build salt-water fuel cell cars and solar cars. Students will design a system to capture geothermal energy, study the fundamentals of wind energy, and design their own wind turbine.

### Modern Quantum Mechanics\*

This course will begin with the early ideas of Quantum Dynamics and the wave-particle duality of life and investigate the works of Bohr, Heisenberg, Born, Pauli, and de Broglie. We will see how an atom is put together and how probability is used to explain reality. We will discuss the Standard Model and build some subatomic particles using our new knowledge.

### Video Game Design\*

Students learn how to create video games in JavaScript. The foundations of computer science and basic programming will be covered so all coding skill levels are welcome. This course will help the students develop logical thinking and problem solving skills while creating their own version of popular video games such as Breakout Snake, Tic Tac Toe, and Connect Four!

### Arduino: Electronics and Computer Programming\*

This workshop requires no experience in electronics or computer programming. You will learn how to build electronic circuits by connecting components using a breadboard and then connect and program an Arduino uno microcontroller to control lights, create sound, use sonar, control motors and servos, and read sensors like temperature. Students may bring their own laptop if available with free Arduino IDE installed. All other parts including Arduino will be provided. **This class is for those students who have not taken Arduino in spring or summer 2022.**

## HUMANITIES

### Let the Adventure Begin

Students will read excerpts from famous adventure writers such as H.G. Wells, Jack London, Mark Twain, Arthur Conan Doyle, and Daniel Defoe. They will create their own adventure story and infuse in the narrative masterful dialogue as a means of developing strong characterization and thrilling action. Students will be assisted by the instructor through a workshop model of sharing, revising and editing to complete their adventure stories.

\*Indicates a \$50 Science Fee

### This Land is Your Land (Advanced)

This course will introduce students to global geographical issues and their impact on the world. They will be immersed in decisions about migration patterns, where and why people and businesses settle in various locations, and how natural resources affect the economy. Students will engage in an Africa interactive simulation that centers around choosing territories based on natural resources. In addition, they will play a popular board game, CATAN, that teaches how to trade, settle and build. The class will also partake in the stock market game to research the positives and negatives of investing in various resources that impact the global world. In the end, students will make decisions on investing in stocks, buying real estate and relocating businesses.

### Legal Minds

This course examines legal and constitutional conflicts in today's environment. Students will explore traditional topics in the separation of powers and Federalism, including Congress's enumerated powers, the scope of Executive power and judicial review, as well as the role of the states and the Federal Government in the Federal structure. Students will use their "legal minds" as they role-play various Constitutional cases in mock trials.

## ART

### The World of Acrylic Painting (Advanced)

Like to paint? This is the course for you. Welcome to the World of Acrylic painting, an art world full of versatility and bright, bold colors. Develop painting skills, techniques, and aesthetic sensibilities related to artistic expression in the acrylic mediums. Emphasis on color and composition. Explore a lifelong passion or explore a new art medium! Surround yourself with students and artists who are as enthusiastic about learning and creating as you are. Take full advantage of the unique properties that acrylics offer and push the boundaries beyond their current artistic capabilities. We will investigate the master artists and painting movements from the past and present to help you improve your painting skills.

\*Indicates a \$50 Science Fee



## ABOUT LONG ISLAND UNIVERSITY (LIU)

Long Island University, founded in 1926, continues to redefine higher education, providing high quality academic instruction by a world-class faculty. Recognized by *Forbes* for its emphasis on experiential learning and by the Brookings Institution for its “value added” approach to student outcomes, LIU offers over 245 accredited programs, with a network of 280,000 alumni that includes industry leaders and entrepreneurs across the globe. Visit [liu.edu](http://liu.edu) for more information.

## ABOUT THE LIU SCHOOL OF PROFESSIONAL STUDIES

Long Island University has a rich legacy of achievement in delivering accessible learning to a diverse and multi-generational community. In the LIU School of Professional Studies, our learning population consists of students of all ages with a wide range of interests and passions. Courses, lectures and special events engage the young and the young-at-heart with lifelong learning opportunities spread across a wide range of disciplines and social and cultural areas. The Center for Gifted Youth, Hutton House Lectures, Theodore Roosevelt Institute, and Paralegal Studies are among the School’s innovative and interactive programs.



**LONG ISLAND UNIVERSITY**

**CENTER FOR GIFTED YOUTH**

720 Northern Blvd.

Brookville, NY 11548-1300

**DATED MATERIAL**

Nonprofit  
U.S. Postage

**PAID**

Long Island University

**FALL PROGRAM**

OCTOBER 8 - DECEMBER 17, 2022