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.
OBJECTIVES OF THE CENTER FOR GIFTED YOUTH

1. To provide activities at appropriate levels and pace
2. To provide opportunities for gifted students to relate to each other intellectually and socially
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 has a psychologist on staff who leads the 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. The psychologist is also available to meet parents on an individual basis to discuss specific concerns. Classroom observations by the psychologist 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 staff psychologists.

ADMISSION

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, superior school performance, and strong personal interests. 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 grades 4 through 8 are generally working a minimum of two years above grade level).

APPLICATION PROCEDURES

New students are accepted into the Center for Gifted Youth 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 following this page.

Because of 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. Applications are accepted on a rolling basis, therefore there is no deadline.

Applications will be reviewed by the admissions committee when all of the following materials have been received:
1. **FORM 1: ENTRANCE APPLICATION**
A completed application form (to be filled out by the child’s parent or legal guardian).

2. **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.

3. **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.

4. **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:

LIU Center for Gifted Youth | LIU Post
720 Northern Boulevard
Brookville, NY 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.
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.

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
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. 2020 __________________

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:

<table>
<thead>
<tr>
<th>INDIVIDUAL TESTS</th>
<th>Test Date</th>
<th>Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>WISC-V</td>
<td></td>
<td>VCI  VSI  FRI  WMI  PSI  FSIQ</td>
</tr>
<tr>
<td>WPPSI-IV</td>
<td></td>
<td>VCI  VSI  FRI  WMI  PSI  FSIQ</td>
</tr>
<tr>
<td>Stanford–Binet V</td>
<td></td>
<td>FR  KN  QR  VS  WM  FS</td>
</tr>
<tr>
<td>Stanford–Binet IV</td>
<td></td>
<td>VR  AVR  QR  STM  COMP</td>
</tr>
<tr>
<td><strong>GROUP TESTS</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cognitive Abilities Test (COGAT)</td>
<td></td>
<td>V  Q  NV  Total</td>
</tr>
<tr>
<td>Otis–Lennon</td>
<td></td>
<td>V  NV  Total</td>
</tr>
<tr>
<td>Other (Name)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

#### ACHIEVEMENT - MATHEMATICS:

<table>
<thead>
<tr>
<th></th>
<th>NATIONAL</th>
<th>LOCAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Test Date</td>
<td>%</td>
<td>Stanine</td>
</tr>
<tr>
<td>Iowa Test of Basic Skills</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>NYS Math (Grade 4)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Terra Nova</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>TONYSS</td>
<td></td>
<td>N/A</td>
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<tr>
<td>Other (Name)</td>
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<td>N/A</td>
</tr>
</tbody>
</table>

#### ACHIEVEMENT - READING:

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<th>LOCAL</th>
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<tbody>
<tr>
<td>Test Date</td>
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<td>Stanine</td>
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<tr>
<td>Iowa Test of Basic Skills</td>
<td></td>
<td>N/A</td>
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<tr>
<td>ELA (Grade 4)</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>Terra Nova</td>
<td></td>
<td>N/A</td>
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<tr>
<td>TONYSS</td>
<td></td>
<td>N/A</td>
</tr>
<tr>
<td>Other (Name)</td>
<td></td>
<td>N/A</td>
</tr>
</tbody>
</table>

### 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 ________________________________
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.

<table>
<thead>
<tr>
<th>Category</th>
<th>Outstanding</th>
<th>High</th>
<th>Average</th>
<th>Below Average</th>
<th>Deficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Prefers complex ideas</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Asks penetrating questions</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Vocabulary</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>4. Originality</td>
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<td></td>
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</tr>
<tr>
<td>5. Curiosity</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>6. Motivation to learn</td>
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<tr>
<td>7. Initiative</td>
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<tr>
<td>8. Commitment to excellence</td>
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<tr>
<td>9. Enthusiasm</td>
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<td></td>
</tr>
<tr>
<td>10. Sense of humor</td>
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<td></td>
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</tr>
<tr>
<td>11. Attention span</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Perseverance &amp; industry</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Emotional stability</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Social maturity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. Frustration tolerance</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 ____________________________________________**
APPLICATION PAYMENT FORM

Method of Payment

_____ Check or money order payable to LONG ISLAND UNIVERSITY
_____ Discover Card
_____ MasterCard
_____ Visa

______ CARD HOLDER’S NAME (as it appears on the credit card)

CREDIT CARD NUMBER


CVV (Last 3 Digits on the back of the card)  EXPIRATION DATE  AMOUNT TO BE CHARGED

Please make checks payable to the Long Island University. Include child’s full name at the bottom of check. You may fax credit card payment information to LIUCGY office at (516) 299-3323. Please call our office after faxing any information to confirm successful transmission. A tuition due letter and new payment form will be mailed at a later date for the remaining balance.

MAIL PAYMENT TO:
Center for Gifted Youth
LIU Post
720 Northern Boulevard
Brookville, New York 11548-1300

_____ I have enclosed a non-refundable application fee of $30.

My signature below denotes that I have read and I am aware of the LIUCGY registration and refund policies.

Parent Signature ___________________________  Date _____________________
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.** We ask you to consider simultaneous enrollment for both the fall and spring semesters. We believe that this will improve the benefits of the program by providing continuity in friendships among students. It will also enable us to plan in advance for the needs of individual students.

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.

TUITION & DEPOSIT FOR ACCEPTED STUDENTS

Full tuition for the Saturday program is $1,885 for each 10-week semester, plus a $35 lab fee per science class.

The tuition includes an $885 non-refundable deposit per semester to be paid when you register your child. We strongly recommend registering your child/children for both fall and spring semesters at this time. We believe this improves your child’s experience by providing continuing friendships among students and allowing us to plan in advance for the needs of the individual. Registering for both semesters may also prevent your child from being closed out of the program in the spring. *The LIU Center for Gifted Youth handles all deposits, tuition and fees. If we are unable to place your child because classes are full, the deposit will not be charged.*

REFUND POLICY

- If you wish to withdraw your child from the Center for Gifted Youth prior to the start of the semester, the tuition minus the deposit may be refunded.
- 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.
- 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.
- **Once the semester has started, there will be no refunds.**
- Tuition must be paid by the due dates listed in the Tuition & Deposit section of this registration, or your child will be removed from classes for that semester and your deposit will be forfeited.
- Under no circumstances will deposit or tuition payments be applied to another student or another semester.
LABORATORY FEES
A laboratory fee of $35 per science course will be charged to all students registered for science courses. These fees should be paid by separate check 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) by completing a payment form(s) and forwarding this information to our office via U.S. mail, to giftedyouth@liu.edu or fax to 516-299-3323. Please email or call the office for this form.
We require a signature, name of credit card, credit card number, expiration date, and CVV (3 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
Long Island University
720 Northern Boulevard
Brookville, NY 11548-1300

GUIDELINES
IMPORTANT: Please mail Fall and/or Spring forms directly to the Long Island University Center for Gifted Youth office.
We encourage all grade 2-8 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. We cannot guarantee placement in the Saturday program.

REGISTRATION POLICY
Students should select, in priority order, three course choices for each hour. All choices listed on the registration form will be considered commitments. Email giftedyouth@liu.edu for this form or call 516-299-2160.

***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.
CALENDAR
FALL SEMESTER 2020
October 10–December 19, 2020
9:00 A.M. – 11:55 A.M.

K-1 SATURDAY EXPRESS:
SCIENCE, MATHEMATICS, AND HUMANITIES
The Saturday Express is a program of exploration and discovery in science, mathematics, and Humanities. Students will be exposed to challenging ideas and concepts rarely introduced or explored in Kindergarten and Grade 1. They will be provided with hands-on learning experiences by expert instructors in mathematics, science, and the Humanities, appropriate to gifted children.

NOTE: Students in grade 2 through 8 attend classes of their choice.

GRADES 2-3
FALL
- Coding Fundamentals with Java Script and Python*
- Global Perspectives in Art (Beginner)
- Investigations in Biological Science*
- Mathematical Problem Solving
- Digital Journalism
- Innovate and Create*

GRADES 4-5
FALL
- Forensic Science*
- Fundamentals in Physical Computing with Two Hardware Configurations*
- Chemical Detectives*
- Advanced Math Brain Games
- Vex Robotics*
- Law and Entertainment
- Global Perspectives in Art (Intermediate)
- Innovative Design*

GRADES 6-8
FALL
- Chemistry for Future Chemists*
- Roving Reporter
- Cell Biology*
- Election 2020
- Mathematical Minds
- Natural and Artificial Intelligence*
- Advanced Vex Robotics*
- Global Perspectives in Art (Advanced)
- Astronomy*

*Indicates Science Fee ($35)
# FALL 2020 CLASS SCHEDULE
October 10–December 19, 2020

## 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.
- Mathematical Problem Solving
- Innovate and Create*
- Investigations in Biological Science*

### Period 2 10:00–10:55 a.m.
- Investigations in Biological Science*
- Global Perspectives in Art (Beginner)
- Coding Fundamentals with Java Script and Python*

### Period 3 11:00–11:55 a.m.
- Digital Journalism
- Innovate and Create*
- Mathematical Problem Solving

## GRADES 4–5

### Period 1 9:00–9:55 a.m.
- Chemical Detectives*
- Vex Robotics*
- Advanced Math Brain Games
- Fundamentals in Physical Computing Using Two Hardware Configurations*

### Period 2 10:00–10:55 a.m.
- Forensic Science*
- Chemical Detectives*
- Innovative Design*
- Law and Entertainment

### Period 3 11:00–11:55 a.m.
- Law and Entertainment
- Forensic Science*
- Advanced Math Brain Games
- Global Perspectives in Art (Intermediate)

## GRADES 6–8

### Period 1 9:00–9:55 a.m.
- Cell Biology*
- Global Perspectives in Art (Advanced)
- Roving Reporter

### Period 2 10:00–10:55 a.m.
- Mathematical Minds
- Election 2020
- Astronomy*

### Period 3 11:00–11:55 a.m.
- Chemistry for Future Chemists*
- Advanced Vex Robotics*
- Natural and Artificial Intelligence*

*Indicates Science Fee ($35)
SATURDAY COURSE DESCRIPTIONS

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

SATURDAY EXPRESS: GRADES K-1 SCIENCE, MATHEMATICS, HUMANITIES

FALL

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.

One class will emphasize mathematical thinking. Students will be encouraged to problem solve while having fun with shapes and numbers, as well as learn a variety of mathematical concepts. Another class will highlight the exploration of individual thematic units in science. The third class will emphasize the humanities, integrating literature, social studies, and the cultural arts, in interdisciplinary study.

Maximum attention is provided to each child in a setting that encourages risk-taking and independent thought and action. Children are also given many opportunities to interact both intellectually and socially. These courses are designed so that students can participate for four consecutive semesters without repeating content.

**Courses subject to change**
FALL 2020  |  COURSE DESCRIPTIONS

GRADES 2-3

Students in grades 2 and 3 will choose three courses from those listed below.

CODING FUNDAMENTALS 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.

GLOBAL PERSPECTIVES IN ART (BEGINNER)

The global artists in this course come from America, China, Japan, and Latin America. Students will explore cultural and artistic perspectives by creating a Chinese Crane painting, a Mexican sculpture, a traditional Japanese painting, as well as a piece inspired by Andy Warhol. Interdisciplinary connections will be explored. Projects will be adapted to the individual interests and ability level of students.

INVESTIGATIONS IN BIOLOGICAL SCIENCE *

This course is designed to provide a variety of learning experiences about living things. The 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.

MATHEMATICAL PROBLEM SOLVING

Students will participate in activities that will help them develop and enhance their problem solving abilities. They will learn to analyze and solve non-routine mathematical problems, identify key words, and use diagrams and tables. They will also identify patterns and develop estimation and deductive reasoning skills. Daily activities include short presentations on key techniques followed by small group and individual practice sets designed to improve critical thinking skills. New problems are selected for each semester. Special attention will be provided to meet the needs, interests, experience and ability of each student.
DIGITAL JOURNALISM
This course is designed to introduce students to the role of the news reporter. Under the guidance of the instructor, and using the computer facilities of the University, students will work independently or in collaborative pairs to investigate people, places and international events. Students will learn the techniques of news, feature, sports, writing and producing.

INNOVATE AND CREATE *
The world of innovation begins with just an idea. This course will be a study of the wonderful world of energy. Students will explore potential and kinetic energy while creating moving machines with just rubber bands, air, water, and solar energy. Students will focus on design and construction techniques. Each student will design and test multiple machines while developing real-world skills in design thinking.

GRADES 4-5
MATHEMATICS AND COMPUTERS
ADVANCED MATHEMATICAL BRAIN GAMES
This course offers its students the opportunity to thoroughly explore geometry. Students will utilize the Internet, as well as other computer applications, to investigate the wonders of polygons, and their relationship with the world around us. This course will include studies of tessellations, congruence, similarity, the polyhedral, measurement, and a myriad of other geometric topics. Students will leave this course with a new respect for, and enjoyment of, geometry.

FUNDAMENTALS IN PHYSICAL COMPUTING USING TWO HARDWARE CONFIGURATIONS *
Students will use two different systems for projects in physical computing; BBC micro:bit that connects to the desktop computer and Pi-Top laptop that has a Rasberry Pi microcomputer. This course welcomes students, whether new or experienced, to engage in hands-on problem solving in constructing electronic circuits and writing either JavaScript or Python code that allow various sensors and actuators to function in the real world. This course has the core elements of STEAM education: namely, Science, Technology, Education, Arts and Math.

SCIENCE
CHEMICAL DETECTIVES *
This course is designed to allow students to explore the world of chemistry. They will be able to take the role of “detectives” as they investigate the area of chemical reactions. The course will also demonstrate how the basics of chemistry help to play a role in our daily lives. Fundamental chemical principles will be applied. Correct laboratory techniques are emphasized and safety procedures are carefully supervised.
VEX ROBOTICS *
STEAM will provide the tools to inspire people who will solve tomorrow’s problems. Vex Robotics will allow students to build programmable robots of high quality that may be used in competitions through the educational design process. Students will have valuable skills in problem-solving, troubleshooting, research and development.

FORENSIC SCIENCE *
Due to many recent television shows and books, forensics has become very popular. This class is an introduction to the fundamentals of the science behind it. Students will learn to find fingerprints, solve puzzles, and use other activities to uncover clues to help them solve cases.

INNOVATIVE DESIGN *
This course focuses on the technology behind harnessing the wind. Students in this course learn that collaborating can be fun. Students work in design teams and will design, construct and experiment with a working wind turbine. Students will be able to use the wind turbine to pump water, lift heavy objects and create electricity.

HUMANITIES

LAW AND ENTERTAINMENT
In this course, students will explore the interesting and provocative 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.

GLOBAL PERSPECTIVES IN ART (INTERMEDIATE)
This course focuses on the global and cultural perspectives of artists from America, China, Japan, and Latin America. Students will create a traditional Chinese Crane painting, a Mexican sculpture, and a traditional Japanese wood cut painting, as well as a piece, inspired by Andy Warhol. The course will allow students to make interdisciplinary connections, to appreciate their own culture, and to find the commonalities that bind us as people. Projects will be tailored to meet the interests and ability levels of students.

GRADES 6-8
MATHEMATICS AND COMPUTERS

NATURAL AND ARTIFICIAL INTELLIGENCE *
Students unpack a topic and clarify differences and similarities between the way humans and modern technology approach that area. The curriculum has different daily topics that include chess, navigation, health, research, sports, entertainment,
customer service, security, memory, music, advertising, and the arts. At the end of each week, students are invited to revisit an old topic or look at a new topic as they present ways in which natural and artificial intelligence are displayed. The course will grow understanding and appreciation of different approaches to intelligence.

**MATHEMATICAL MINDS**

Students will become acquainted with challenging topics in mathematics through exploration and problem-solving situations. Activities and projects will help students come to a clearer understanding of mathematical concepts that will prepare them for further study. Areas of exploration will include: conic sections, math modeling, logic, probability and game theory, inductive and deductive reasoning, number systems and imaginary numbers. Mathematical material chosen will be dependent upon student interest and ability level.

**SCIENCE**

**ASTRONOMY * **

This visually rich course is designed to provide a nontechnical description of modern astronomy, including the structure and evolution of planets, stars, galaxies, and the Universe as a whole. It includes a substantial number of new images, diagrams, and animations. Spectacular discoveries reported up to 2019 are integrated throughout these lectures, and more recent findings are included as well.

**CHEMISTRY FOR FUTURE CHEMISTS * **

This course emphasizes, through a laboratory setting, how chemistry influences the daily aspects of our lives. Why do certain chemicals react the way they do? What is titration? How do various food ingredients affect the human body? Students will use their unique abilities to investigate these intriguing questions through chemical experimentation in the laboratory. Students will become familiar with scientific terminology as they study solids, liquids, gases, and other related scientific topics.

**ADVANCED VEX ROBOTICS * **

This course makes the connection of educational robotics to engineering. Educational robotics is a great context for having students practice the engineering design process, and it also provides a context for students
to develop and refine their technical verbal and written communication skills. Through the design process, students also have the freedom to hone valuable skills with problem-solving, troubleshooting, research and development, invention and innovation.

**CELL BIOLOGY**

Cell biology is the study of the structure and function of prokaryotic and eukaryotic cells. In this class, we will use microscopes to delve into the world of cells. Students will learn the various techniques to make different types of slides and practice the procedures necessary to view slides at the highest quality. Students will investigate the similarities and differences between prokaryotic and eukaryotic cells. They will learn detailed information about the structure and function of the cell membrane and cell organelles. Students will take an in-depth look at the structure and function of DNA and RNA and the roles they play in our lives. Students will then investigate the cell cycles of mitosis and meiosis. Finally, students will study what happens when the cell cycle stops working properly by looking at cancer.

**HUMANITIES**

**ELECTION 2020 AND BEYOND**

Campaign 2020, “The Road to the White House,” has become a historical race in United States politics. Who will be the next United States President? Which way will undecided voters turn and how much money will be spent? Throughout this new course, students will be introduced to the ever-changing world of Presidential campaigns and United States politics. Through such activities as debates, gallery walks, Socratic seminars and interactive lectures, students will understand how United States elections evolved, who our next United States president may be and how that decision will affect our everyday lives.

**GLOBAL PERSPECTIVE IN THE ARTS (ADVANCED)**

This course will focus on the global perspective of artists and various cultures from around the world. The artists selected come from America, China, Japan, and Latin America. Students will have an opportunity to create a traditional Chinese Crane Painting, a Mexican Alebrije sculpture, a traditional Japanese Woodcut painting, as well as a painting inspired by Andy Warhol. These lessons are designed to encourage students to look outside of their environment to make connections and appreciate their own culture, and to recognize the commonalities that bind us as people. Projects will be tailored to meet the interests and ability levels of students.

**ROVING REPORTER**

Students will pitch ideas for a Fall newspaper or magazine. They will propose articles about new happenings in gaming, technology, entertainment, sports, and current events. Once agreed upon, they will research and write their articles for publication. Students may also include personal interviews, online search, surveys and/or personal experiences to reflect their point of view. The class will learn about and abide by the First Amendment Constitutional laws for reporting.
ABOUT THE LONG ISLAND UNIVERSITY (LIU)
LIU, 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 nearly 400 accredited programs, with a network of 265,000 alumni that includes industry leaders and entrepreneurs across the globe. Visit 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 Sanford Institute of Philanthropy are among the School’s innovative and interactive programs.
FALL PROGRAM
OCTOBER 10-DECEMBER 19, 2020