

2021 SUMMER ONLINE PROGRAMS

FOR HIGH-SCHOOL, MIDDLE-SCHOOL & ELEMENTARY-SCHOOL AGED STUDENTS

Contact Information

Chantilly/South Riding Office:
43250 Stonewall Pond St., South Riding, VA 20152

Office Hours: Monday – Friday from 5:00pm – 8:00pm
Our other centers (Ashburn, Herndon, Fairfax, Durga Temple) are temporarily closed

Office Phone Number: (703) 798-6808
Website: www.curielearning.com
Email: curielearning@gmail.com

SUMMER BRIDGE MATH PROGRAM

CLICK HERE TO REGISTER: <https://forms.gle/RctpxFr9ehCUj2qa8>

Contact by phone: 703-798-6808 or 703-582-0436

Contact by email: curielearning@gmail.com

This eight-week course is recommended for students who are new to our program or who would like the “bridge the gap” between levels during the summer months. For those who plan to join our program for the upcoming year, this will give the student a boost for the upcoming school year. This is also a good fit for those who would like to continue the student’s education though the summer months in a challenging way. **The curriculum used for this course includes units that are taught in our program for the previous school year; for example, an advanced 6th grade student will be taught most of our Level 5 curriculum for this course and will be on track to take our Level 6 program in the fall.**

The teaching will be conducted in a small group setting according to grade level. Students will be given videos and homework after every session which will need to be done before the next class. Parental support will be needed to help monitor the homework and parents will be given answer keys in order to provide the student with the immediate feedback necessary.

****There will be a discounted price of \$895 total for any student enrolled for both Bridge Math Program and Non-Fiction Reading and writing courses.****



\$695

Rising Level:	Rising Level 2 (Our Level 1 Curriculum)	Rising Level 3 (Our Level 2 Curriculum)	Rising Level 4 (Our Level 3 Curriculum)	Rising Level 5 (Our Level 4 Curriculum)	Rising Level 6 (Our Level 5 Curriculum)
Online	Mondays & Wednesdays 5pm – 6:00pm (Online) & Saturdays (Optional) 9:30 am – 11:00 am (South Riding Center) 6/21 - 8/14	Mondays & Wednesdays 6pm – 7:30pm 6/21 - 8/11	Mondays & Wednesdays 7:30pm – 9pm 6/21-8/11	Tuesdays & Thursdays 6pm – 7:30pm 6/22-8/12	Tuesdays & Thursdays 7:30pm – 9pm 6/22-8/12

Curie's Signature Advanced Academic Preparation Program

RISING 8TH GRADE

July 2021 - December 2021

Contact by phone@ 703-582-0436 or 703-798-6808

This program incorporates high-level coursework in math, English, writing, science and critical thinking with a focus on preparation for success in high school and college. This program will prepare students not only to pass any test for admission into specialized programs like AET, AOS, and TJ, but also to succeed and even thrive in high school and later in College.

Last chance for new 8th grade students to join!

Only a few students will be accepted after conducting an evaluation exam.

SAT 1/PSAT/ACT COURSE

CLICK HERE TO REGISTER: <https://forms.gle/zWfNJGErhJQ4sW5q8>

Contact by phone: 703-798-6808 or 703-582-0436

Contact by email: curielearning@gmail.com

This eight-week course focuses on strategies of reading non-fiction material. Students will write reports to demonstrate their reading comprehension, and reflection on the material read. This is highly recommended to improve reading comprehension skills, which is very important for academic success. The general knowledge gained through this course will help students in writing essays on diversified topics. Strong knowledge in diversified non-fiction topics are essential for future advanced/higher learning programs.

\$795

Online: Sundays 5:15pm – 7:15pm and *Wednesdays 6:30pm – 8:30pm. **June 20th - August 15th**

The class meets twice per week for a total of **32 hours** of classroom time over 16 sessions.

*No classes will be held on July 2nd, 3rd & 4th due to the Independence Day holiday.

English Only: Sundays - \$495

Math Only: Wednesdays - \$495

Curriculum for the SAT/PSAT/ACT English Course:

Writing: Correcting errors in passages for sentence structure, usage, and punctuation. Revising and editing passages widely varied in purpose, subject and complexity for improving the substance and the quality of writer's message.

Reading: Reading closely for determining what's stated or implied in a passage, citing textual evidence, determining central ideas and themes, summarizing, understanding relationships, interpreting words and phrases in context.

Curriculum for the SAT/PSAT/ACT Math Course:

Mathematics: Topics to be covered (but not limited to) include: Analyzing relations using proportions and percentages; analyzing data using measures of central tendency of data; conversion of units; using counting and probability concepts for solving real world context problems; identifying equivalent algebraic expressions; solving: exponential, absolute and linear equations, inequalities, systems of linear equations, and quadratic equations; modeling and graphing of real world situations using linear and nonlinear functions; translations and reflections of functions; addition, subtraction, multiplication and division of complex numbers; logarithm operation; sequences; trigonometric functions; lines and angles; solving problems related to perimeter, area, surface area, and volume of 2-D and 3-D figures.

ENGLISH COURSES

Non-Fiction English Reading and Writing:

(For Rising Grades 3-7)

CLICK HERE TO REGISTER: <https://forms.gle/2gaWiRpjKzFE3BwQ6>

Contact by phone: 703-798-6808
Contact by email: curielearning@gmail.com

This **seven-week** course focuses on strategies of reading non-fiction material. Students will write reports to demonstrate their reading comprehension, and reflection on the material read. This is highly recommended to improve reading comprehension skills, which is very important for academic success. The general knowledge gained through this course will help students in writing essays on diversified topics. Strong knowledge in diversified non-fiction topics are essential for future advanced/higher learning programs.

*This course will require the purchase of two non-fiction books.
Once you have registered, an email will be sent to you listing the books that you will need to purchase.*

****NOTE:** The Continuing Math course is often coupled with the Non-Fiction Reading/Writing classes (see page 7). There will be a discounted price of \$475 total for any student enrolled for both Continuing Math and Non-Fiction Reading and Writing courses.

\$275

Total Teaching Hours:

10.5

Rising Grade:	Rising 3 rd Grade	Rising 4 th Grade	Rising 5 th Grade	Rising 6 th Grade	Rising 7 th Grade
Online	Tuesday 6:00pm – 7:30pm 6/22 - 8/3	Monday 6:00pm – 7:30pm 6/21 - 8/2	Wednesday 6:00pm – 7:30pm 6/23 - 8/4	Monday 7:30pm – 9:00pm 6/21 - 8/2	Wednesday 7:30pm – 9:00pm 6/23 - 8/4

Writing the ACT Essay

(For Rising Grades 10, 11, or 12)

CLICK HERE TO REGISTER: <https://forms.gle/bWDXL9WMERjKBGM9A>

Contact by phone: 703-798-6808
Contact by email: curielearning@gmail.com

This **eight-session** course will greatly benefit students who will be taking the ACT with the essay portion in the next year. Students will engage in intensive practice writing ACT essays, eventually progressing to writing them within the 50-minute time limit. The class involves peer editing; students must be comfortable sharing their writing and feedback with peers.

Students will be taught in small groups that focus on the students' individual writing. The schedule will be set according to the availability of the teacher and students. The classes will meet week for eight sessions.

\$325

Online: Mondays 7:30pm – 8:30pm. (June 21st - August 9th)

Writing College Application Essays

(For Rising Grades 10, 11, or 12)

CLICK HERE TO REGISTER: <https://forms.gle/4SHXZM3wiERyN1jL6>

A **seven-week** course providing intensive instruction and practice in writing college application essays. Students will write several of the Common Application essays, which are used in many universities' application processes. The class involves peer editing; students must be comfortable sharing their writing and feedback with peers.

\$425

Online: Mondays 5:30pm – 7:00pm. (June 21st - August 2nd)

MATH COURSES

Continuing Math Program (For Continuing Curie Learning students ONLY)

CLICK HERE TO REGISTER: <https://forms.gle/qJv5utfd1AtJc>

Contact by phone: 703-798-6808
Contact by email: curielearning@gmail.com



This **seven-week** instructional course continues the concepts taught during the previous academic school year. One extra unit will be taught per Level.

This class is strictly intended for students who have been attending through the previous school year. One additional unit will be taught as a continuation of our regular academic program.

****NOTE:** The Non-Fiction Reading & Writing course is often coupled with the Continuing Math course (see page 3). There will be a discounted price of \$475 total for any student enrolled for both Continuing Math and Non-Fiction Reading and writing courses.

\$275

Continuing Level:	Continuing Level 2 <small>(Rising Level 3) Measurement Unit</small>	Continuing Level 3 <small>(Rising Level 4) Pre-Algebra Unit</small>	Continuing Level 4 <small>(Rising Level 5) Geometry Unit</small>	Continuing Level 5 <small>(Rising Level 6) Probability Unit</small>	Continuing Level 6 <small>(Rising Level 7) Geometry Unit</small>
Online	Wednesday 6:00pm – 7:00pm 6/24 - 8/5	Thursday 6:30pm – 7:30pm 6/25 - 8/6	Monday 6:30pm – 7:30pm 6/22 - 8/3	Thursday 7:30pm – 8:30pm 6/25 - 8/6	Monday 7:30pm – 8:30pm 6/22 - 8/3

Algebra 1

CLICK HERE TO REGISTER: <https://forms.gle/mYTar2q1LKkBE8359>

Contact by phone: 703-798-6808
Contact by email: curielearning@gmail.com

This **eight-week** course is intended to prepare students for taking High-School Algebra 1 during the upcoming academic year. Whether students are taking Algebra 1 as a seventh, eighth, or ninth grader in their day schools, our program will help prepare students for this high-school-level math class (which affects their high school GPA). Not only will we give the students a head start with the concepts taught in any Algebra 1 course, we will help them transition into an advanced high school level course by expecting a certain degree of rigor and independent learning skills. Also, gaining a thorough understanding of Algebra 1 concepts is necessary for scoring well in SAT/ACT later on.

Students will be given video as a reference to the lessons, but the lessons will be taught during class time.

Concepts for this Course Include: Recognizing parts of an expression or equation; Simplifying numerical expressions using the order of operations; Evaluating, naming, and simplifying algebraic expressions; Solving single variable equations and inequalities; Solving absolute equations; Recognizing and graphing functions; Graphing linear equations and inequalities; Solving a system of linear equations; Factoring polynomials; Solving and graphing quadratic equations; Application of algebraic concepts for solving real-world word problems.

\$595

ONLINE ONLY:

Section 1: Mondays and Wednesdays from 6:30 – 8:30 pm (**June 21st - August 11th**)

Section 2: Tuesdays and Thursdays from 6:30 – 8:30 pm (**June 22nd - August 12th**)

The class meets twice per week for a total of **32 hours** of classroom time over 16 sessions.

*No classes will be held on July 2nd, 3rd & 4th due to the Independence Day holiday.

High School Geometry

CLICK HERE TO REGISTER: <https://forms.gle/3HwkZ3i9t2WhC6aC8>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

This **eight-week** course is intended to prepare students for taking high school Geometry during the upcoming academic year. In the day schools, Geometry is the class that follows Algebra 1 the previous year.

Whether students are taking Geometry as a middle school or high school student, our program will help prepare them for this high-school-credit math class (which affects their high school GPA). Not only will we give the students a head start with the concepts taught in any

Geometry course, we will help them to transition into an advanced Geometry course by expecting a certain degree of rigor and independent learning skills. Also, gaining a thorough understanding of Geometry concepts is necessary for scoring well in SAT/ACT.

Concepts for this Course Include: Identifying and using the characteristics of various polygons and finding their area, perimeter, and other measurements; Recognizing and utilizing the characteristics and graphs related to two-dimensional entities including points, lines, planes, angles, and slopes on the coordinate plane; Applying logic and reasoning in the form of relationships and characteristics of two-dimensional shapes; Solving geometric proofs; Applying geometric concepts to solve word problems and real-life situations.

\$595

ONLINE ONLY: Tuesdays and Thursdays 6:30pm – 8:30pm. (June 22nd - August 12th)

The class meets twice per week for a total of **32 hours** of classroom time over 16 sessions.

Algebra 2

CLICK HERE TO REGISTER: <https://forms.gle/RyavAnaph7ycBWDz8>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

This **eight-week** course is intended to prepare students for taking high school Algebra 2 during the upcoming academic year. In the day schools, Algebra 2 is the class that follows Geometry the previous year.

Our program will help prepare students for this high-school-credit math class (which affects their high school GPA). Not only will we give the students a head start with the concepts taught in any Algebra 2 course, we will help them to transition into an advanced program in the

schools by expecting a certain degree of rigor and independent learning skills. Also, gaining a thorough understanding of Algebra 2 concepts is necessary for scoring well in SAT/ACT later on.

Concepts for this Course Include: Identifying functional relationships between quantities through equations and inequalities, graphing of functions and mathematical modeling, understanding, solving, and graphing logarithms; understanding and using trigonometric relationships to solve for missing measurements, solving mathematical operations on complex numbers, collecting and analyzing data, counting and probability.

\$695

ONLINE ONLY: Mondays and Wednesdays 12:00pm – 2:00pm. (June 21st - August 11th)

The class meets twice per week for a total of **32 hours** of classroom time over 16 sessions.

*No classes will be held on July 2nd, 3rd & 4th due to the Independence Day holiday.

Pre-Calculus

CLICK HERE TO REGISTER: <https://forms.gle/yMUWBaQfp6VeAQF48>

This **eight-week** course is intended to prepare students for taking high school Pre-Calculus during the upcoming academic year. In the day schools, students have the option to take Pre-Calculus after completing Algebra 2.

Our program will help prepare students for this high-school-credit math class (which affects their high school GPA). Not only will we give the students a head start with the concepts taught in any Pre-Calculus course, we will help them to transition into an advanced Pre-Calculus

course by expecting a certain degree of rigor and independent learning skills. Also, gaining a thorough understanding of Pre-Calculus concepts is necessary to prepare for higher level math courses like AP Calculus, Calculus AB/BC, and AP Statistics.

Concepts for this Course Include: Recognizing, solving, and graphing functions and double-variable equations; recognizing, solving, and graphing rational, exponential, trigonometric, and logarithmic functions; Recognizing and utilizing trigonometric identities with one and two variables, completing sequences and series, Analyzing geometric concepts, Solving problems using linear algebra and matrices, Finding the likelihood of a situation using theoretical probability and probability distribution for random variables; Solving and graphing conic equations, understanding some introductory concepts to calculus including limits.

\$695

ONLINE ONLY: Mondays and Wednesdays 6:30pm – 8:30pm. (June 21st - August 11th)

The class meets twice per week for a total of **32 hours** of classroom time over 16 sessions.

Calculus AB

CLICK HERE TO REGISTER: <https://forms.gle/PQDiSnB2SKv7fPZz5>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

This **eight-week** course is intended to prepare students for taking AP Calculus AB/BC course in the coming academic year. Most of the topics in AP Calculus BC are included in AP Calculus AB. Preparing for the AP course is a great idea not only for scoring a high grade in the course, but also for scoring well in the AP Exam at the end of the academic year. Many colleges require an AP Exam score of 4 or 5 to transfer the course for college credit. Subject SAT (SAT II) exams have been removed by the College Board and colleges will be highly focused on the AP subject scores in the admission process.

Concepts for this Course Include: Limits and Continuity, Differentiation: Definition and Fundamental Properties, Differentiation: Composite, Implicit, and Inverse Functions, Contextual Applications of Differentiation, Analytical Applications of Differentiation, Integration and Accumulation of Change, Differential Equations, Applications of Integration.

\$695

ONLINE ONLY: Sundays and Wednesdays 9:30am – 11:30am. (June 20th - August 15th)

The class meets twice per week for a total of **32 hours** of classroom time over 16 sessions.

*No classes will be held on July 2nd, 3rd & 4th due to the Independence Day holiday.

Research Statistics-I

CLICK HERE TO REGISTER: <https://forms.gle/WhA9X7o3cVrAuBL47>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

This **one-week** course is intended to cover the basic concepts of Research Statistics-I. This course is intended for students who will be taking this course during Summer 2020 or Fall 2020. A solid beginning in the freshman year is very important for confidence building; however, any student rising 9th, 10th, or 11th grade is welcome to join. This is a fast-track course, which meets on 6 consecutive days.

\$295

ONLINE: "This course will be contingent upon enrollment numbers"

SCIENCE COURSES

High-School Biology

CLICK HERE TO REGISTER: <https://forms.gle/7AXf7yhKucCpUUEP9>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

This **seven-week** course is intended to prepare students for taking AP Biology course in the coming academic year. Preparing for the AP course is useful, not only for getting a high grade in the course, but also for scoring well in the AP Exam at the end of the academic year.

Many colleges require an AP Exam score of 4 or 5 to transfer the course for college credit. Subject SAT (SAT II) exams have been removed by the College Board and colleges will now be more focused on AP subject scores in the admission process.

Concepts for this Course Include: Chemistry of Life, Cell Structure and Function, Cellular Energetics, Cell Communication and Cell Cycle, and Heredity. We also focus on AP Exam taking strategies and a full-length practice exam will be conducted at the end of the course.

\$625

ONLINE: Tuesdays & Thursdays from 6:30pm – 8:30pm (**June 29th** – **August 12th**)

The class meets twice per week for a total of **28 hours** of classroom time over 14 sessions.

Honors Chemistry

CLICK HERE TO REGISTER: <https://forms.gle/5iFyK4r5LAaBTYNPA>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

This **eight-week** course is intended to prepare students for taking an Honors Chemistry course in the coming academic year. Honors chemistry is often considered a more difficult high school course, as it is a college prep. course. It is very mathematically and logically driven. A head-start with these concepts will help in student success when taking the Honors Chemistry course during the school year.

Concepts for this Course Include: Measurement and matter; Atomic structure ; Periodic Table and Properties of Elements ; Chemical bonding ; Chemical reactions ; Stoichiometry

\$695

ONLINE: Tuesdays from 6:30pm to 8:30pm & Thursdays from 6:30pm – 8:30pm (**June 22nd** – **August 12th**)

The class meets twice per week for a total of **32 hours** of classroom time over 16 sessions.

***No** classes will be held on July 2nd, 3rd & 4th due to the Independence Day holiday.

AP Chemistry

CLICK HERE TO REGISTER: <https://forms.gle/kV1nxNv162LikrzY6>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

This **eight-week** course is intended to prepare students for taking AP Chemistry course in the coming academic year. Preparing for the AP course is a great idea not only for getting a high grade in the course, but also for scoring well in the AP Exam at the end of the academic year. Many colleges require an AP Exam score of 4 or 5 to transfer the course for college credit. Subject SAT (SAT II) exams have been removed by the College Board and colleges from now on will be looking at AP subject scores in the admission process.

Concepts for this Course Include: Atomic Structure and Properties, Molecular and Ionic Compound Structure and Properties, Intermolecular Forces and Properties, Chemical Reactions, Kinetics, Thermodynamics, Equilibrium, Acids and Bases, Applications of Thermodynamics.

\$695

ONLINE: Saturdays from 9:30am to 11:30am & Tuesdays from 6:30pm – 8:30pm (**June 19th** – **August 14th**)

The class meets twice per week for a total of **32 hours** of classroom time over 16 sessions.

***No** classes will be held on July 2nd, 3rd & 4th due to the Independence Day holiday.

General High-School Physics/AP Physics

High School Physics Honors / AP Physics 1 / AP Physics C: Mechanics

CLICK HERE TO REGISTER: <https://forms.gle/42Cc7r4Q1CpokPmb6>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

This **eight week** course is designed to prepare students to take high school general physics or AP physics during the upcoming academic school year. The base knowledge one can acquire in High School Physics Honors, AP Physics 1 and AP Physics C: Mechanics courses is the same except that AP Physics 1 is algebra based and AP Physics C: Mechanics is calculus based. We teach concepts using algebra; however, the concepts and problem-solving strategies behind the methods are similar for all high school physics courses. Our course will provide an excellent head start no matter which physics course the student is taking during the upcoming school year; we teach the physics concepts as well as the strategies to solve and simulations for experience.

After taking our course students may be able to bypass High School Physics Honors and go straight for either AP Physics 1 or AP Physics C: Mechanics. Our course also helps students to decide on taking AP Physics 1 or AP Physics C: Mechanics. Preparing for the course in summer is beneficial because many colleges require an AP Exam score of 4 or 5 to transfer the course for college credit.

NOTE: If there is enough of a demand for it, we can add classes for students who would like to be exposed to the calculus-based problems for an extra fee.

Concepts for this Course Include: Kinematics, Dynamics, Circular Motion and Gravitation, Energy, Momentum, Simple Harmonic Motion, oscillations, Torque and Rotational Motion. We also focus on AP Exam taking strategies and a full-length practice exam will be conducted at the end of the course.

\$695

ONLINE: Thursday 6:30 pm – 8:30 pm, and Saturday 12pm – 2pm. (June 24th - August 14th)

The class meets twice per week for a total of **32 hours** of classroom time over 16 sessions.

*No classes will be held on July 2nd, 3rd & 4th due to the Independence Day holiday.

Integrated AoS Freshman Math/Physics

CLICK HERE TO REGISTER: <https://forms.gle/W9k2gTwEv5VdwWZW9>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

This **eight week** course that covers Integrated AoS Math/Physics. This class is intended for rising 9th grade students; however, any rising 9th, 10th or 11th grade student is welcome to join. The AoS Integrated Physics course is a required course for all freshman in the AoS program. The course takes a different look at mathematics—instead of teaching how to apply formulas and methods to solve problems, the Integrated Physics course requires that students learn and understand *why* the methods work and *how* the formulas are derived. Students will apply the scientific method to discover the logic behind the math! In this course, we follow the structure and strategies of the AoS program.

\$695

ONLINE: Tuesday 6:30 pm – 8:30 pm, and Sunday 9:30am – 11:30am. (June 22nd – August 15th)

The class meets twice per week for a total of **32 hours** of classroom time over 16 sessions.

*No classes will be held on July 2nd, 3rd & 4th due to the Independence Day holiday.

COMPUTER COURSES

Intro to JAVA/ACSL Programming

Rising 6th Grade and Up

CLICK HERE TO REGISTER: <https://forms.gle/zoa8kHrzaugTvyfc6>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

In this **six-week** (6 Sessions) course, students will be exposed to basics of programming using JAVA, a widely used general purpose programming language. This course also serves to introduce the students to American Computer Science League (ACSL) programming part of the competition. This course is highly recommended for rising 6th, 7th, or 8th grade students and can be used as a supporting evidence example in preparing the Student Information Sheet (SIS) during TJ/AOS admission process. Students will have hands-on experience with coding. This course will be taught by a JAVA expert.

\$250

ONLINE: Wednesdays from 6:30pm – 8:30pm (**June 23rd** – **July 28th**)

The class meets once per week for a total of **12 hours** of classroom time over 6 sessions.

TJ Freshman/High School JAVA

CLICK HERE TO REGISTER: <https://forms.gle/QVSdqoViWT3Jh3a36>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

In this **six-week** course students will learn to program using JAVA, a widely used general purpose programming language. This course is designed to prepare students to excel in freshman Computer Science course at TJ and Computer Science course at other high schools for rising 9th, 10th, 11th or 12th grade students. Students will have hands-on experience with coding. Classes meet twice a week.

\$495

ONLINE: Mondays & Wednesdays from 10:00am – 12:00pm (**June 21st** – **July 28th**)

The class meets twice per week for a total of **24 hours** of classroom time over 12 sessions.

AP Computer Science

CLICK HERE TO REGISTER: <https://forms.gle/BNnjGpX3roqhpUe7>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

This **six-week** course is intended to prepare students for taking AP Computer Science A course in the coming academic year. Preparing for the AP course is a great idea not only for getting a high grade in the course, but also for scoring well in the AP Exam at the end of the academic year. Many colleges require an AP Exam score of 4 or 5 to transfer the course for college credit. Subject SAT (SAT II) exams have been removed by the College Board and colleges from now on will be looking at AP subject scores in the admission process.

Concepts for this Course Include: Primitive Types, Using Objects, Boolean Expressions and if Statements, Iteration, Writing Classes, Array, ArrayList, 2D Array, Inheritance, Recursion. We also focus on AP Exam taking strategies and a full-length practice exam will be conducted at the end of the course.

\$495

ONLINE: Tuesdays & Thursdays from 10:00am – 12:00pm (**June 22nd** – **July 29th**)

The class meets twice per week for a total of **24 hours** of classroom time over 12 sessions.

STEM COURSES & CAMPS

Learning Physics Concepts with Simulations Course

Rising 7th & 8th Graders

CLICK HERE TO REGISTER: <https://forms.gle/ycT3CbNVegf6TtFm9>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

A **six-week** course where students will learn important physics concepts (in the areas of classical physics, light, sound, electricity) by conducting and analyzing experiments and simulations. The course is taught by a highly experienced physics professor from George Mason University.

\$450

ONLINE: Thursday 6:30 pm – 8:30 pm, and Saturday 1:00pm – 3:00pm. (**June 24th** – **August 5th**)

The class meets twice per week for a total of **24 hours** of classroom time over 12 sessions.

***No** classes will be held on July 2nd, 3rd & 4th due to the Independence Day holiday.

Python Programming Course – ONLINE

Rising 7th to 10th Graders

CLICK HERE TO REGISTER: <https://forms.gle/bnAeC4ars4qmfp8g8>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

During this **Three-week** long course, students will use a web-based programming software to learn from the ground up all of the fundamentals of computer programming in Python. Throughout the course, students will be working on several projects, and attend lectures from experienced programming students. Our instructor will go over the basics of Python programming and delve into advanced techniques, while incorporating many activities and projects.

\$225

ONLINE: Tuesdays & Thursdays from 10:00am – 12:00pm (**June 29th** – **July 15th**)

The class meets twice per week for a total of **12 hours** of classroom time over 6 sessions.

3D CAD Camp - ONLINE

Rising 6th to 9th Graders

CLICK HERE TO REGISTER: <https://forms.gle/shQ57XX6dUXSVRbM6>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

During this **one-week** long camp course, students will use a web-based Computer-Aided Design software to learn the in's and out's of 3D design. Our team of experienced instructors will be sharing their knowledge of 3D design with students, showing not only how to model and create their own parts from scratch, but also how to connect, assemble, and animate entire assemblies. By the end of the camp, students will have worked on dozens of projects to build their skills!

\$225

CAMP 1 – Level 1 for Rising 6th to 9th Graders

ONLINE: 5 days camp (June 21st – June 25th)

from 9:00am – 12:00pm (15 students or less) Students will have 2 breaks 10 mins each.

from 9:00am – 2:00pm (15 students to 25 students) Students will have Lunch break.

OR

CAMP 2 – Level 2 for Rising 9th to 12th Graders

(Also includes students who finished level 1, or finished last year 3D CAD camp can also join.)

ONLINE: 5 days camp (July 19th – July 23rd)

from 9:00am – 12:00pm (15 students or less) Students will have 2 breaks 10 mins each.

from 9:00am – 2:00pm (15 students to 25 students) Students will have Lunch break.

Robotics & 3-D Printing Camp - ONLINE

Rising 6th to 9th Graders

CLICK HERE TO REGISTER: <https://forms.gle/E2cJXswm86nN7mkH9>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

During this **one-week** long camp course, students will use hands-on robotics kits along with our experienced robotics instructors to learn the intricacies of Arduinos and robotics. Our team of instructors will be walking students through the basics of assembling the robotics kit to programming it to follow a line, detect walls, and many other projects throughout the week. Students will learn the basics of C++ or Arduino programming, and will gain experience with assembling and testing a robot kit.

Please order the robotics kit as soon as you register for the camp -

The kit link: [https://www.amazon.com/ELEGOO-Tracking-Ultrasonic-](https://www.amazon.com/ELEGOO-Tracking-Ultrasonic-IntelligentEducational/dp/B07KPZ8RSZ/ref=sr_1_2?dchild=1&keywords=uno%2Bproject&qid=1620766827&sr=8-2&th=1)

[IntelligentEducational/dp/B07KPZ8RSZ/ref=sr_1_2?dchild=1&keywords=uno%2Bproject&qid=1620766827&sr=8-2&th=1](https://www.amazon.com/ELEGOO-Tracking-Ultrasonic-IntelligentEducational/dp/B07KPZ8RSZ/ref=sr_1_2?dchild=1&keywords=uno%2Bproject&qid=1620766827&sr=8-2&th=1)

\$225

CAMP 1 - ONLINE: 5 days camp (July 26th – July 30th) from 10:00am – 3:00pm

CAMP 2 - ONLINE: 5 days camp (August 9th – August 13th) from 10:00am – 3:00pm

The class meets every day for a week for a total of **20 hours** of classroom time (Breaks are not included).



ROBOTICS CAMP ITINERARY

CAMPS WILL RUN FROM 10:00 AM - 3:00 PM WITH OCCASIONAL BREAKS



DAY 1 (7/26)

Topics Covered: Robot Building

- 10:00 AM - 10:20 AM
 - Intros and Ice Breakers
- 10:20 AM - 11:00 AM
 - What is Arduino?
- 11:15 AM - 11:45 AM
 - Start Building kit
- 12:05 PM - 12:45 PM
 - Continue Building Kit
- 12:45 PM - 1:30 PM
 - Lunch
- 1:30 PM - 2:10 PM
 - Finish Building Kit
- 2:20 PM - 3:00 PM
 - Setup software and how to use it

DAY 2 (7/27)

Topics Covered: Programming, Object detection

- 10:00 AM - 10:40 AM
 - Introduction to Programming
- 10:40 AM - 11:30 AM
 - Begin Robot Movement
- 11:30 AM - 12:20 Pm
 - Project 1
- 12:20 PM - 12:45 PM
 - Object Detection
- 12:45 PM - 1:30 PM
 - Lunch
- 1:30 PM - 2:20 PM
 - Project 2
- 2:20 PM - 3:00 PM
 - Maze

DAY 3 (7/28)

Topics Covered: Programming, Line Tracking

- 10:00 AM - 10:40 AM
 - Show programming presentation for line detection/tracing
- 10:40 AM - 11:30 AM
 - Line detection demonstration
- 11:30 AM - 12:20 PM
 - Start working on line detection code
- 12:45 PM - 1:30 PM
 - Lunch Break
- 2:20 PM - 3:00 PM

- Complete maze programming

DAY 4 (7/29)

Topics Covered: Learning about the robots

- 10:00 AM - 10:40 AM
 - What is FIRST?
- 10:40 AM - 11:30 AM
 - Our team's experiences
- 11:30 AM - 12:20 PM
 - Introducing Flappy Bird project
- 12:45 PM - 1:30 PM
 - Lunch Break
- 1:30 PM - 2:20 PM
 - Flappy Bird Competition (part 1)
- 2:20 PM - 3:00 PM
 - Complete Flappy Bird Competition (part 2)

DAY 5 (7/30)

Topics Covered: Presentation

- 10:00 AM - 10:40 AM
 - Learn about presenting
- 10:50 AM - 11:30 AM
 - Make presentations
- 11:40 AM - 12:20 PM
 - Continue presentation
- 12:45 PM - 1:30 PM
 - Lunch Break
- 1:30 PM - 2:10 PM
 - Practice rehearsing presentations
- 2:10 PM - 3:00 PM
 - Give presentations



ROBOTICS CAMP ITINERARY

CAMPS WILL RUN FROM 10:00 AM - 3:00 PM, WITH OCCASIONAL BREAKS



DAY 1 (8/9)

Topics Covered: Robot Building

- 10:00 AM - 10:20 AM
 - Intros and Ice Breakers
- 10:20 AM - 11:00 AM
 - What is Arduino?
- 11:15 AM - 11:45 AM
 - Start Building kit
- 12:05 PM - 12:45 PM
 - Continue Building Kit
- 12:45 PM - 1:30 PM
 - Lunch
- 1:30 PM - 2:10 PM
 - Finish Building Kit
- 2:20 PM - 3:00 PM
 - Setup software and how to use it

DAY 2 (8/10)

Topics Covered: Programming, Object detection

- 10:00 AM - 10:40 AM
 - Introduction to Programming
- 10:40 AM - 11:30 AM
 - Begin Robot Movement
- 11:30 AM - 12:20 Pm
 - Project 1
- 12:20 PM - 12:45 PM
 - Object Detection
- 12:45 PM - 1:30 PM
 - Lunch
- 1:30 PM - 2:20 PM
 - Project 2
- 2:20 PM - 3:00 PM
 - Maze

DAY 3 (8/11)

Topics Covered: Programming, Line Tracking

- 10:00 AM - 10:40 AM
 - Show programming presentation for line detection/tracing
- 10:40 AM - 11:30 AM
 - Line detection demonstration
- 11:30 AM - 12:20 PM
 - Start working on line detection code
- 12:45 PM - 1:30 PM
 - Lunch Break
- 2:20 PM - 3:00 PM

- Complete maze programming

DAY 4 (8/12)

Topics Covered: Learning about the robots

- 10:00 AM - 10:40 AM
 - What is FIRST?
- 10:40 AM - 11:30 AM
 - Our team's experiences
- 11:30 AM - 12:20 PM
 - Introducing Flappy Bird project
- 12:45 PM - 1:30 PM
 - Lunch Break
- 1:30 PM - 2:20 PM
 - Flappy Bird Competition (part 1)
- 2:20 PM - 3:00 PM
 - Complete Flappy Bird Competition (part 2)

DAY 5 (8/13)

Topics Covered: Presentation

- 10:00 AM - 10:40 AM
 - Learn about presenting
- 10:50 AM - 11:30 AM
 - Make presentations
- 11:40 AM - 12:20 PM
 - Continue presentation
- 12:45 PM - 1:30 PM
 - Lunch Break
- 1:30 PM - 2:10 PM
 - Practice rehearsing presentations
- 2:10 PM - 3:00 PM
 - Give presentations