
2022 SUMMER ONLINE PROGRAMS

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

Contact Information

South-Riding/Chantilly Office Hours:

Monday through Friday

From 6:30 pm to 8:30 pm

Until June 19th, 2022

Office Phone Number:

(703) 798-6808

Website: www.curielearning.com

Email: curielearning@gmail.com

Ashburn Office Hours:

Monday from 6:30 pm to 8:30 pm

Wednesday from 6:30 pm to 8:30 pm

Thursday from 6:30 pm to 8:30 pm

Until June 19th, 2022

Office Phone Number:

(703) 798-6808

Website: www.curielearning.com

Email: curielearning@gmail.com

Herndon Office Hours:

Saturday from 10 am to 1 pm

Until June 19th, 2022

Office Phone Number:

(703) 798-6808

Website: www.curielearning.com

Email: curielearning@gmail.com



CENTER ADDRESSES FOR IN-PERSON CLASSES:

Ashburn Center: 20604 Gordon Park Sqr. Suite 150, Ashburn VA 20147

Herndon Center: 13505 Dulles Technology Dr., Herndon, VA 20171

South Riding Center: 43250 Stonewall Pond St., South Riding, VA 20152

Curie's Signature Rising Level 8: Advanced Academic Preparation Program for Rising 8th Grade Students

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.

This program is a continuation of the Signature Level 7 – 8 Program, which started in September of the previous year. If you would like to join the program in the summer, please join ASAP. Since this is NOT a new program, if your child is enrolled in this summer program, they will not receive any previous material; rather, they will continue with new material given.

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

Link for the Level 7 Enrollment form: <https://forms.gle/ddzGFtn2J2SZ51Zx5>

SAT 1/PSAT/ACT COURSE

CLICK HERE TO REGISTER: <https://forms.gle/m8hnPLu5zQnqH9aq7>

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

Contact by email: curielearning@gmail.com

This eight-week online course is intended to prepare students for taking both Math and English parts of SAT/ACT Test at the end of August or later. Students in 11th or 12th grade who will be taking or retaking these standardized tests at the end of August or later are encouraged to join. Students preparing for the PSAT are also welcome to join, as the topics tested for the SAT and PSAT are mostly identical. These students include rising 11th graders who plan to take the PSAT in October and the SAT and/or ACT at a later date.

English classes meet on Sundays for two hour periods.

Math classes meet on Thursdays for two hour periods.

\$795

Online: Thursdays 6:30pm – 8:30pm and *Sundays 5:15pm – 7:15pm. June 26th - August 21st

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

English Only: Sundays ; \$495

Math Only: Thursdays ; \$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/DQYBxLmdWZnsvg5k7>

Contact by phone: 703-798-6808

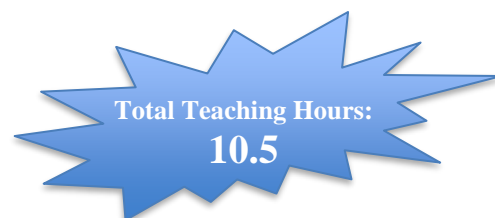
Contact by email: curielearning@gmail.com

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. In TJ/AOS admission process, success in the second cut exam requires knowledge on diversified non-fiction topics. ***Students will only be permitted to join the sections for which they are registered.**

Instructional videos or class visitations will not be permitted should a student miss class.

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.

Discounts apply when coupled with the following classes:
Bridge Program & Non-Fiction Reading/Writing: -\$100
Continuing Math & Non-Fiction Reading/Writing: -\$100
****The discount will be taken from the total amount****



Rising Grade:	Rising 3 rd Grade	Rising 4 th Grade	Rising 5 th Grade	Rising 6 th Grade	Rising 7 th Grade
Online <small>*For online courses, materials are provided through the Google Classroom and are printed from home by the students.</small>	Tuesdays 5:30pm – 6:30pm 6/28 - 8/9 \$215 (7 teaching hours)	Mondays 6:00pm – 7:30pm 6/27 - 8/15 <small>[NO CLASS 7/4]</small> \$325	Tuesdays 6:00pm – 7:30pm 6/28 - 8/9 \$325	Mondays 7:30pm – 9:00pm 6/27 - 8/15 <small>[NO CLASS 7/4]</small> \$325	Tuesdays 7:30pm – 9:00pm 6/28 - 8/9 \$325
In Person	Tuesdays 6:45pm – 7:45pm 6/28 - 8/9 South Riding Center \$265	Wednesdays 6:00pm – 7:30pm 6/29 - 8/10 South Riding Center \$375	Thursdays 6:00pm – 7:30pm 6/30 - 8/11 South Riding Center \$375	Wednesdays 7:30pm – 9:00pm 6/29 - 8/10 South Riding Center \$375	Thursdays 7:30pm – 9:00pm 6/30 - 8/11 South Riding Center \$375

Writing College Application Essays

For Rising Grades 10- 12

(This is *part one* of the Writing II course that runs during the school year)

CLICK HERE TO REGISTER: <https://forms.gle/kx5XtyvR92YsdPd99>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

An **eight-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.

\$440

Online: Tuesdays 5:30pm – 7:00pm. (June 21st - August 16th)

Persuasive Writing Fundamentals

for Rising Grades 9-12

(This is part one of the Writing I course that runs during the school year)

CLICK HERE TO REGISTER: <https://forms.gle/EfZpTsEThhfkVNXY5>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

An **eight-week** course providing intensive instruction and practice in persuasive essays (five-paragraph argumentative essays). Mastering persuasive writing skills is crucial for student success in English classes in high school and college. Students will improve their writing pieces through weekly feedback from the teacher and their peers. This is a small-group class, structured similarly to a writing group. Students are expected to bring their writing assignment each week to share with the class. They are expected to give and accept feedback from the teacher and their peers. This small-group class structure provides an ideal environment for writing improvement.

\$440

Online: Wednesdays 5:30pm – 7:00pm. (June 22nd - August 10th)

MATH COURSES

Summer Bridge Math Program

CLICK HERE TO REGISTER: <https://forms.gle/FyHK7rVjyd9nnyUV9>

Contact by phone: 703-798-6808

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 rising 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.

Total Classroom
Teaching Hours:
23-24

Discounts apply when coupled with the following classes:
 Bridge Program & Non-Fiction Reading/Writing: -\$100
 Continuing Math & Non-Fiction Reading/Writing: -\$100
 The discount will be taken from the *total amount*

\$725

Rising Level:	Rising Level 2 <small>(Our Level 1 Curriculum)</small>	Rising Level 3 <small>(Our Level 2 Curriculum)</small>	Rising Level 4 <small>(Our Level 3 Curriculum)</small>	Rising Level 5 <small>(Our Level 4 Curriculum)</small>	Rising Level 6 <small>(Our Level 5 Curriculum)</small>
Online Class	Mondays & Wednesdays 4:30pm – 6:00pm 6/20 - 8/15 [NO CLASS 7/4]	Mondays & Wednesdays 6pm – 7:30pm 6/20 - 8/15 [NO CLASS 7/4]	Tuesdays & Thursdays 6pm – 7:30pm 6/21-8/11	Mondays & Wednesdays 7:30pm – 9pm 6/20 - 8/15 [NO CLASS 7/4]	Tuesdays & Thursdays 7:30pm – 9pm 6/21-8/11
	In-person Saturday Support Session (Optional) 9:30am – 11:30am [SOUTH RIDING]	In-person Saturday Support Session (Optional) 9:30am – 11:30am [SOUTH RIDING]	In-person Saturday Support Session (Optional) 11:30am – 12:30pm [SOUTH RIDING]	In-person Saturday Support Session (Optional) 11:30am – 12:30pm [SOUTH RIDING]	In-person Saturday Support Session (Optional) 11:30am – 12:30pm [SOUTH RIDING]

Continuing Math Program

(For Continuing Curie Learning Students ONLY)

CLICK HERE TO REGISTER: <https://forms.gle/gZRRc4mS1cxovghHA>

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.

Discounts apply when coupled with the following classes:
 Bridge Program & Non-Fiction Reading/Writing: -\$100
 Continuing Math & Non-Fiction Reading/Writing: -\$100
 The discount will be taken from the total amount

COURSE:	Continuing Level 2 (Rising Level 3) Measurement Unit	Continuing Level 3 (Rising Level 4) Pre-Algebra Unit	Continuing Level 4 (Rising Level 5) Geometry Unit	Continuing Level 5 (Rising Level 6) Probability Unit	Continuing Level 6 (Rising Level 7) Geometry Unit
Online	Wednesdays 5:00pm – 6:00pm 6/29 - 8/10 \$285	Tuesdays 6:30pm – 7:30pm 6/28 - 8/9 \$285	Mondays 6:30pm – 7:30pm 6/27 - 8/15 \$285 <i>[NO CLASS 7/4]</i>	Tuesdays 7:30pm – 8:30pm 6/28 - 8/9 \$285	Mondays 7:30pm – 8:30pm 6/27 - 8/15 \$285 <i>[NO CLASS 7/4]</i>
In Person	Saturdays *STUDY HALL* 9:30am – 11:30am <i>These are optional in-person sections to support the Online Continuing Level 2 class—this is not a separate section.</i>	Wednesdays 7:30pm – 8:30pm 6/29 - 8/10 South Riding Center \$335	Thursdays 7:30pm – 8:30pm 6/30 - 8/11 South Riding Center \$335	Wednesdays 6:30pm – 7:30pm 6/29 - 8/10 South Riding Center \$335	Thursdays 6:30pm – 7:30pm 6/30 - 8/11 South Riding Center \$335

Algebra 1

CLICK HERE TO REGISTER: <https://forms.gle/bGyQq7pwcUwsZyz68>

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-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 1 course, we will help them to 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. High SAT/ACT scores are required for getting admission into good colleges.

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

[CLICK HERE FOR THE CURRICULUM LIST](#)

\$725
 Online—
 Mondays & Wednesdays
 from 6:30 – 8:30 pm
[6/20 – 8/15]

\$775
 South Riding Center—
 Mondays & Wednesdays
 from 6:30 – 8:30 pm
[6/20 – 8/15]

This class will meet twice per week for two-hour sessions for a total of 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/ED7CsaoF7qLKG5Cv8>

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 later on. High SAT/ACT scores are required for getting admission into good colleges.

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.

\$725

Online-- Wednesdays 6:30pm – 8:30pm and Sundays 12:30pm – 2:30pm [6/19 – 8/14]

This class will meet twice per week for two-hour sessions for a total of 16 sessions.

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

Algebra 2

CLICK HERE TO REGISTER: <https://forms.gle/7gQQ1f9zN4T7d9bc8>

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, the progression of math courses is the following order: first Algebra 1, then Geometry, then Algebra 2; Algebra 2 is a course required for a high school diploma and which most students take as 8th, 9th, or 10th graders (depending upon their level).

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 Algebra 2 course 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. High SAT/ACT scores are required for getting admission into good colleges.

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.

\$725

Online-- Wednesdays 6:30pm – 8:30pm and Sundays 12:30pm – 2:30pm [6/19 – 8/14]

This class will meet twice per week for two-hour sessions for a total of 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/rDYjG7m1Ok4mPXNQ7>

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 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.

\$725

Online-- Tuesdays 6:30pm – 8:30pm and Sundays 10:00am – 12:00pm [6/19 – 8/14]

This class will meet twice per week for two-hour sessions for a total of 16 sessions.

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

Calculus AB

CLICK HERE TO REGISTER: <https://forms.gle/WWRbvBEzR1zibmK3A>

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.

\$725

Online-- Tuesdays 10:00am – 12:00pm and Sundays 10:00am – 12:00pm [6/19 – 8/14]

This class will meet twice per week for two-hour sessions.
*No classes will be held on July 2nd, 3rd & 4th due to the Independence Day holiday.

AET Freshman Math

CLICK HERE TO REGISTER: <https://forms.gle/7gQQ1f9zN4T7d9bc8>

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

If a students will be joining the AET Freshman course for the upcoming school year, it is recommended that the student register for our **Algebra 2** course. This is the material that will best prepare students for the AET Freshman Math program.

Please see the information for the Algebra 2 Course

SCIENCE COURSES

High School (Honors) Biology

CLICK HERE TO REGISTER: <https://forms.gle/LGbRtDtRopwhxV8J9>

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

This **eight-week** instruction-based course is intended to prepare students who will be taking a General or Honors biology course during the upcoming school year. In this instruction-based course, we cover all the general material taught in any high school biology course plus the higher-level concepts taught in the Honors & AP courses.

For students who are taking AP Biology during the upcoming school year, it is recommended that the student join our AP Test Preparation course during the school year; it is in the AP Test Preparation course that we focus on the upcoming AP Exam.

Concepts for this Course Include: Chemistry of Life, Cell Structure and Function, Cellular Energetics, Cell Communication and Cell Cycle, and Heredity.

\$725

Online-- Mondays 6:30pm – 8:30pm and Thursdays 6:30pm – 8:30pm [6/20 – 8/15]

This class will meet twice per week for two-hour sessions.
*No classes will be held on July 2nd, 3rd & 4th due to the Independence Day holiday.

AP Biology

CLICK HERE TO REGISTER: <https://forms.gle/Exou4aGn9Axjs6h8A>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

This **eight-week** instruction-based course is intended to prepare students who will be taking a General or Honors biology course during the upcoming school year. In this instruction-based course, we cover all the general material taught in any high school biology course plus the higher-level concepts taught in the Honors & AP courses.

For students who are taking AP Biology during the upcoming school year, it is recommended that the student join our AP Test Preparation course during the school year; it is in the AP Test Preparation course that we focus on the upcoming AP Exam.

Concepts for this Course Include: Evolution, Energetics, Information Storage and Transmission, Systems Interactions

\$725

Online-- Mondays 6:30pm – 8:30pm and Thursdays 6:30pm – 8:30pm [6/20 – 8/15]

This class will meet twice per week for two-hour sessions.

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

Honors Chemistry

CLICK HERE TO REGISTER: <https://forms.gle/GWa6aFQUNhFzTmhDA>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

This **eight-week** instruction-based 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

\$725

Online-- Wednesdays 6:30pm – 8:30pm and Saturdays 10:00am – 12:00pm [6/18 – 8/13]

This class will meet twice per week for two-hour 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/DQTbpJC2FgaKvJY16>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

This **eight-week** instruction-based 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.

\$725

Online-- Wednesdays 6:30pm – 8:30pm and Saturdays 10:00am – 12:00pm [6/18 – 8/13]

This class will meet twice per week for two-hour 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/6cNtrTvNHAEqVbV47>

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 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.

\$725

Online-- Mondays 6:30pm – 8:30pm and Thursdays 6:30pm – 8:30pm [6/20 – 8/15]

This class will meet twice per week for two-hour 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/vmgCn2wxuCN4RCBeA>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

This **eight-week** course 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 freshmen 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!

\$725

Online-- Thursdays 6:30pm – 8:30pm and Saturdays 9:00am – 11:00am [6/18 – 8/13]

This class will meet twice per week for two-hour sessions.

The course will run through the week of 6/21 through the week of 8/8. (Classes meeting Fridays, Saturdays, Sundays, or Mondays will run until 8/21).

*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/e3kX6VUCJxVoSPUx7>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

For course content inquiries contact: (ray.manchanda@gmail.com)

In this course students will learn to program using JAVA, a widely used general purpose programming language. In this **three-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.

\$275

ONLINE: Tuesdays & Thursdays from 9:00 am – 11:00 am (July 12th – July 28th)

This class will meet twice per week for two-hour sessions.

High School/TJ Freshman JAVA

CLICK HERE TO REGISTER: <https://forms.gle/tXdT9dRsLGGsfkFE8>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

In this **eight-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.

\$550

Online: Tuesdays 4:00pm – 6:00pm and Thursdays 4:00pm – 6:00pm [6/21 – 8/11]

This class will meet twice per week for two-hour sessions.

The course will run through the week of 6/21 through the week of 8/8. (Classes meeting Fridays, Saturdays, Sundays, or Mondays will run until 8/21).

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

AP Computer Science

CLICK HERE TO REGISTER: <https://forms.gle/ZMsA2Mqt4nqpE6WT9>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

This **eight-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.

\$550

Online: Mondays 4:00pm – 6:00pm and Wednesdays 4:00pm – 6:00pm [6/20 – 8/15]

This class will meet twice per week for two-hour sessions for a total of 16 sessions.

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

STEM COURSES & CAMPS

Python Programming Course – ONLINE

Rising 7th to 10th Graders

CLICK HERE TO REGISTER: <https://forms.gle/XQMm3YXyemh3ZJo16>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

For course content inquiries contact: (ray.manchanda@gmail.com)

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

\$250

ONLINE: Saturdays & Sundays from 12:00 – 2:00 pm (July 9th – July 24th)

This class will meet twice per week for two-hour sessions.

C++ Language Camp

Rising 7th to 10th Graders

CLICK HERE TO REGISTER: <https://forms.gle/vxZrimpzKLMUMVxc7>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

In the **one week** C-Language camp, students will use and learn the C-language programming software to learn from the ground up all of the fundamentals of reading and interpreting mathematical operations using C-Language. Throughout the camp, students will be working on several projects and will receive instruction with several goals in mind related to mathematical calculations. **See page.13 for the camp itinerary.**

\$295

ONLINE: 5 days camp (August 15th – August 19th) from 9:30am – 3:00pm

*Lunch Break from 11:30 AM to 1 PM

Robotics Camp & 3-D Printing Camp – (In-Person)

Rising 6th to 9th Graders

CLICK HERE TO REGISTER: <https://forms.gle/ZXJKLMN9rhNJU2JX9>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

For course content inquiries contact: (xtremevoltage10515@gmail.com)

During this **one-week** camp, 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 basics of C++ or Arduino programming, and will gain experience with assembling and testing a robot kit.

See page.14 for the camp itinerary.

\$375

In-Person at South-Riding center 5 days camp

(June 20th – June 24th) from 9:00am – 2:00pm

*Lunch Break from 11:45 AM to 12:30 PM

3D CAD Camp - ONLINE

Rising 6th to 9th Graders

CLICK HERE TO REGISTER: <https://forms.gle/QQvc71LC9DS4qgvN8>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

For course content inquiries contact: (ray.manchanda@gmail.com)

During this **one-week** camp, 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, including gear assemblies, part modeling, and even assembling entire robots!

\$250

ONLINE: 5 days camp (June 27th – July 1st) from 9:00am – 12:00pm

Experimental Physics

Rising 6th - 8th Graders

CLICK HERE TO REGISTER: <https://forms.gle/6U1G5tYwjrXp49aRA>

Contact by phone: 703-798-6808

Contact by email: curielearning@gmail.com

A six-week course that covers an overview of basic physics concepts. This course is intended to generate interest in the physical Sciences through hands on laboratory activities in various areas of physics. This course is highly recommended for rising 6th and 7th Graders as it can be used as a strong supporting evidence example in preparing the Student Information Sheet (SIS) during TJ/AOS admission process. This course is also highly recommended for rising 8th Graders who have not participated in enough STEM based activities so far. Physics is the backbone of Engineering and inspiring the young minds early on is the key for their academic success in later years. Classes meet twice a week.

\$450

Ashburn Center: Wednesdays 6:30pm – 8:30pm and Fridays 6:30pm – 8:30pm [7/6 – 8/12]

This class will meet twice per week for two-hour sessions for a total of 12 sessions.

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

Learning Physics Concepts with Simulations Course

Rising 7th & 8th Graders

CLICK HERE TO REGISTER: <https://forms.gle/XMMtdavzSuiGVcic9>

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 high school teacher.

\$450

Online: Mondays 6:30pm – 8:30pm and Saturdays 12:00pm – 2:00pm [6/25 – 8/13]

This class will meet twice per week for two-hour sessions for a total of 13 sessions.

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

C++ Programming Language Online Camp Itinerary

<p>Day 1:</p> <p>Module 1: Programming in Basics</p> <p>Project:</p> <ol style="list-style-type: none">1. Print your name.2. Print your name and address in the new line.3. Addition two numbers. <p>Module 2: Variable and Constants</p> <p>Project:</p> <ol style="list-style-type: none">4. Subtraction of two numbers.5. Multiplication of three numbers.6. Division of two numbers with and without remainder.	<p>Day 2:</p> <p>Module 3: Operators and Expressions</p> <p>Project:</p> <ol style="list-style-type: none">7. Evaluate $T = a + b * c / d$.8. Calculate average of three numbers using float and integer variable.9. Calculate Perimeter of rectangle.10. Calculate Area of square. <p>Module 4: Formatted Input/Output</p> <p>Project:</p> <ol style="list-style-type: none">11. Convert centigrade to Fahrenheit temperature and vice versa.12. Calculating a year, month and day from a given number.13. Calculate factorial of a number.14. Calculate GCD of a number
<p>Day 3:</p> <p>Module 5: Decision Making and Branching</p> <p>Project:</p> <ol style="list-style-type: none">15. Largest among two numbers.16. Check number is even or odd.17. Compare largest among three numbers using ternary operator. <p>Module 6: Looping</p> <p>Project:</p> <ol style="list-style-type: none">18. Print 1 to 10.19. Evaluate $1 + 2 + 3 + \dots + n$20. Make a Fibonacci series.21. $1^2 + 2^2 + 3^2 + \dots + n^2$22. Print the Pattern * *****	<p>Day 4:</p> <p>Module 7: Function</p> <p>Project:</p> <ol style="list-style-type: none">23. Print "Hello World" using creating own function.24. Addition using function with argument with return type.25. Subtraction using function without argument without return type. <p>Module 8: Array</p> <p>Project:</p> <ol style="list-style-type: none">26. Create an array and inset value in array.27. Arrange n number of arrays in ascending order.28. Arrange n number of arrays in descending order.29. Matrix addition.30. Matrix subtraction
<p>Day 5:</p> <p>Module 9: String</p> <p>Project:</p> <ol style="list-style-type: none">31. Calculate length of a string.32. Concatenate two string.33. Convert string to uppercase. <p>Module 10: Pointer and file</p> <p>Project:</p> <ol style="list-style-type: none">34. Creating file in read mode.35. Creating file in write mode.	

Robotics Online Camp Itinerary with Xtreme Voltage

<p>Day 1:</p> <p><i>Topics Covered: Robot Building</i></p> <ul style="list-style-type: none">• 9:00 AM - 9:20 AM<ul style="list-style-type: none">○ Intros and Ice Breakers• 9:20 AM - 10:00 AM<ul style="list-style-type: none">○ What is Arduino?• 10:15 AM - 10:45 AM<ul style="list-style-type: none">○ Start building kit• 11:05 AM - 11:45 PM<ul style="list-style-type: none">○ Continue building kit• 11:45 AM - 12:30 PM<ul style="list-style-type: none">○ Lunch• 12:30 PM - 1:10 PM<ul style="list-style-type: none">○ Finish building kit• 1:20 PM - 2:00 PM<ul style="list-style-type: none">○ Setup software and how to use it	<p>Day 2:</p> <p><i>Topics Covered: Programming, Object detection</i></p> <ul style="list-style-type: none">• 9:00 AM - 9:40 AM<ul style="list-style-type: none">○ Introduction to Programming• 9:40 AM - 10:30 AM<ul style="list-style-type: none">○ Begin Robot Movement• 10:30 AM - 11:20 PM<ul style="list-style-type: none">○ Project 1• 11:20 PM - 11:45 PM<ul style="list-style-type: none">○ Object Detection• 11:45 AM - 12:30 PM<ul style="list-style-type: none">○ Lunch• 12:30 PM - 1:20 PM<ul style="list-style-type: none">○ Project 2• 1:20 PM - 2:00 PM<ul style="list-style-type: none">○ Maze
<p>Day 3:</p> <p><i>Topics Covered: Programming, Line Tracking</i></p> <ul style="list-style-type: none">• 9:00 AM - 9:40 AM<ul style="list-style-type: none">○ Show programming presentation for line detection/tracing• 9:40 AM - 10:30 AM<ul style="list-style-type: none">○ Line detection demonstration• 10:30 AM - 11:45 PM<ul style="list-style-type: none">○ Start working on line detection code• 11:45 AM - 12:30 PM<ul style="list-style-type: none">○ Lunch Break• 12:30 PM - 2:00 PM<ul style="list-style-type: none">○ Maze programming	<p>Day 4:</p> <p><i>Topics Covered: Learning about the robots</i></p> <ul style="list-style-type: none">• 9:00 AM - 9:40 AM<ul style="list-style-type: none">○ What is FIRST?• 9:40 AM - 10:30 AM<ul style="list-style-type: none">○ Our team's experiences• 10:50 AM - 11:45 PM<ul style="list-style-type: none">○ Introducing Flappy Bird project• 11:45 AM - 12:30 PM<ul style="list-style-type: none">○ Lunch Break• 12:30 PM - 1:20 PM<ul style="list-style-type: none">○ Flappy Bird Competition (part 1)• 1:20 PM - 2:00 PM<ul style="list-style-type: none">○ Complete Flappy Bird Competition (part 2)
<p>Day 5:</p> <p><i>Topics Covered: Presentation</i></p> <ul style="list-style-type: none">• 9:00 AM - 9:40 AM<ul style="list-style-type: none">○ Learn about presenting• 9:50 AM - 10:30 AM<ul style="list-style-type: none">○ Make presentations• 10:40 AM - 11:45 PM<ul style="list-style-type: none">○ Continue presentation• 11:45 AM - 12:30 PM<ul style="list-style-type: none">○ Lunch Break• 12:30 PM - 1:10 PM<ul style="list-style-type: none">○ Practice rehearsing presentations• 1:10 PM - 2:00 PM<ul style="list-style-type: none">○ Give presentations	



CENTER ADDRESSES FOR IN-PERSON CLASSES:

Ashburn Center: 20604 Gordon Park Sqr. Suite 150, Ashburn VA 20147

Herndon Center: 13505 Dulles Technology Dr., Herndon, VA 20171

South Riding Center: 43250 Stonewall Pond St., South Riding, VA 20152