Option II Classes

Maximum 15 students per class

Teachers will provide extra help after class in small groups twice per week; there are scheduled assessments and exams every weekend for all option II courses.

Mathematics

Honors Advanced Algebra II

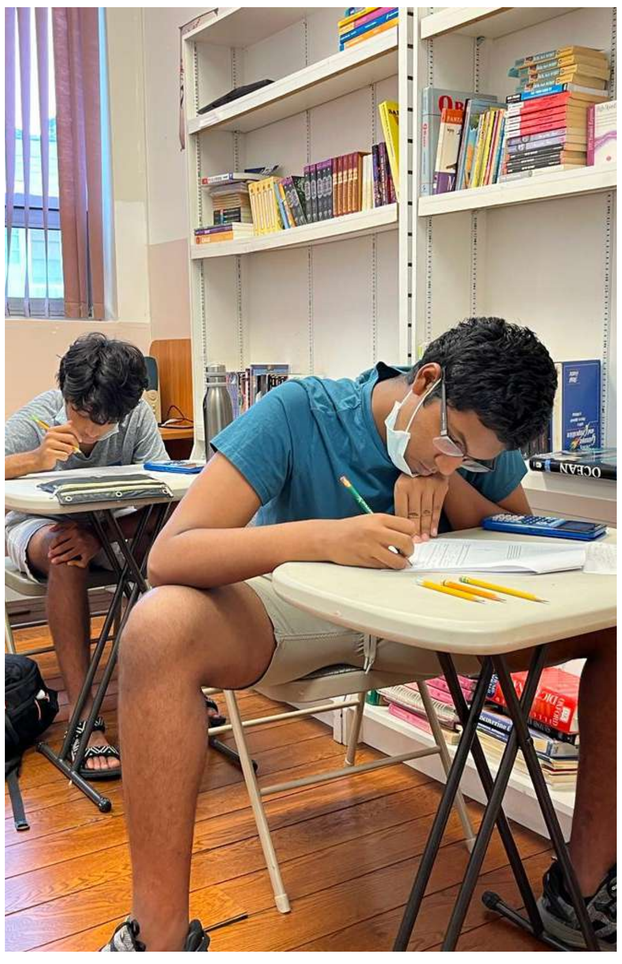
Students study advanced algebraic concepts and functions, both exponential and logarithmic. They also learn non-linear equations, conics, matrices and determinants.
Textbook: Big Ideas Math Algebra 2, Ron Larson and Laurie Boswell, ISBN: 9781608408405

Honors Geometry

Students learn the logical thought process required for developing geometric proofs and drawing appropriate conclusions. They examine concepts of congruence, similarity, and transformation as well as angle and line relationships.
Textbook: Geometry, McDougal Littell, ISBN: 0866099654; Houghton Mifflin, ISBN: 0544385810

Honors Pre-Calculus/Pre-Calculus

Students study trigonometry, inverse functions, selected analytic geometry, probability, and basic concepts of differential and integral functions.
Textbook: Precalculus with Limits, Larson/Hostetler, ISBN: 9780547219929 Advanced Mathematics; Precalculus with Discrete Mathematics and Data Analysis, Houghton Mifflin, ISBN: 0395551897



Science

Honors Biology

Students focus on the structure and function of a cell, sources of energy, genetics, evolution, and fundamental life processes.
Textbook: Biology Concepts and Applications by Cecie Starr, ISBN: 0-534-46223-5

Honors Chemistry

Students study the qualities of matter, the behavior of electrons and waves, chemical bonding and reactions. There will be hands-on lab activities.
Textbook: Chemistry by Prentice Hall, ISBN: 0-13-115262-9

Honors Physics

Students study the qualities of matter, the behavior of electrons and waves, chemical bonding and reactions. There will be hands-on lab activities.
Textbook: Chemistry by Prentice Hall, ISBN: 0-13-115262-9

Computer Science

***Java coure 12 weeks program, start on May 20. 5/20 - 6/24 weekend online.**

Introduction to Computer Science with Java

Students will learn the basics of computer science. The course is designed to introduce students to the foundational concepts of the fields of computing and technology, and how these fields can impact the world.
Textbook: Starting Out With Java: Early Objects, by Tony Gaddis and online resources

AP Computer Science A

This course aligns with the College Board AP Computer Science A curriculum covering topics usually included in a college-level computer science course.
Textbook: Building Java Programs: A Back to Basics Approach, By Stuart Regis and Marty Steep

Enrichment

Maximum 10 students per class

English

Reading, Vocabulary and Literature

Students apply deduction skills and strategies to analyze short stories. Fundamentals of language arts - listening, speaking, reading, and writing - are stressed. students strengthen their vocabulary, grammar, and reading abilities.
Textbook: Sadlier-Oxford Online Sources

Grades: A 4-5 B 6-7 C 7-8 D 8-9

Grammar and Composition

Emphasis is put on grammar, short essays, and creative writing Students read novels and short stories to strengthen reading comprehension and vocabulary.
Textbook: Vocabulary Workshop by Sadlier-Oxford Grammar and Composition - Writer's Choice by Glencoe

Grades: A 4-5 B 6-7 C 7-8 D 8-9

Second Language

Training & Practice in Chinese/French/Spanish

Textbook: **Chinese:** varied references and Far East Book o., Ltd., 2008. Chinese for Youth Level 4 (Revised Edition):
French: varied references and Exercices De Grammaire En Contexte; Niveau Intermediaire/eleve; Hachette Livre 2000; Discovering French Rouge: Valette; McDougal Littell, 2008 **Spanish:** varied references : and Nassi & Levy; Amsco School Publications, 2009.
All above languages may use newspaper articles, films, the internet and other technologies.

Grades: Medium/Advance Level

Mathematics

Preview in Pre-Algebra, Algebra I or II

This class will allow students to "preview" the math class that they will be taking next year: either Pre-Algebra or Algebra I/I. They will be introduced to math concepts and will be given a background for accelerated math learning.

Grades: B 6-7 C 7-8 D 9+

Preview in AP Calculus AB

Apply limits to define definite integrals and how the Fundamental Theorem connects integration and differentiation.Topics may include: Using definite integrals to determine accumulated change over an interval.
Textbook: AB Calculus for the AP, Third Edition, Sullivan, Miranda, 2020, Bedford, Freeman and Worth

Grades: D 10+

Science

Introduction to High School Biology

Students preview biology by learning core scientific principles, theories, and processes governing living organisms, biological systems, and natural phenomena. This will give them a background for accelerated learning.
Textbook: Cecie Starr. Thompson

STEM+

***call us about additional options**

STEM focused Science + Tech

The basics of biology, chemistry, physics, engineering and related fields are covered. Students learn fundamental concepts for a deeper understanding of how science is present in everyday life. Foundations of scientific theory is explored through lectures, labs, and demonstrations. Students also learn the applications of robotics, technology, and engineering by building robots.
Textbook: Prentice Hall

Introduction to Python + Math

Students will learn the basics of Python language programming. Topics include data types, variables, arithmetic and Boolean expressions, control structures, functions, lists. etc. Once students grasp these building blocks they will be introduced to the pyGame package that allows for programmers to more easily build video games in Python. By the end of the course students will be able to write stand-alone Python programs

STEM + Creative Writing & Math

SAT/ACT

SSAT/ISEE

Students will learn the format of the SSAT and ISEE, review the verbal and math skills required for each test, and check their progress with practice tests.
Textbook: McGraw-Hill's SSAT/ISEE

SAT/PSAT/ACT

Students will review the verbal and math skills needed for the test.
Textbook: College Board, Barron's, Princeton Review