



SUMMER
SKILLS

For Success

2017

June 26 - August 4

summer.mka.org

SUMMER SKILLS FOR GRADES 5 - 8

JUNE 26 - AUGUST 4



MEET THE DIRECTOR

Scott Coronis is a veteran teacher who has held numerous administrative positions and taught English, math and science at various levels during his 30-year career at MKA. Well-known throughout the community as a master tutor for students of all ages, Scott was a past Director of STAR Camp and enters his seventh year as Director of Summer Skills for Success.

MKA's Summer Skills for Success program offers courses in reading, writing, and mathematics for students entering grades 5 – 10 looking for advanced credit, enrichment and skill development in those areas. Students meet in small groups taught by outstanding faculty in air-conditioned classrooms at MKA's Middle School campus.

Classes in algebra (I and II), geometry and pre-algebra meet from 8:30 a.m. - 12:30 p.m. for six weeks from June 26 to August 4 (no classes on Monday, July 3 and Tuesday, July 4), for a total of 120 hours and are the equivalent of attending a full-year course at MKA's Upper School or Middle School.

Enrichment and skill development courses in reading, writing and math meet from 8:30 - 10:30 a.m. and 10:30 a.m. – 12:30 p.m. in three, two-week sessions from June 26 to August 4 (except July 3 and 4), for a total of 40 hours and are the equivalent of attending a quarter-long course at MKA's Middle School. Students must attend two courses from 8:30 a.m. -12:30 p.m., so parents need to choose two of the options from the enrichment and skill development courses. Single course sign up is not available.

TUITION AND FEES:

1. Six-week courses - \$1,200
2. Two-week courses - \$400 per course
3. No charge for early registration. \$50 registration fee after May 1 and for all walk-in registrations
4. Late registration (after May 1st)—payment must be in full including the \$50 late registration fee
5. All money is refundable until May 31, 2015

Food Service: Students are expected to bring their own snacks. Lunch is not served, as the program ends at 12:30 p.m.



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COURSE DESCRIPTION



English:

English courses are taught for three, two-week sessions.

Reading courses are taught from 8:30 – 10:30 a.m.

Grades 5-6 (Session I only) and grades 7-8 (Session II only)

The two-week Reading courses are offered for students entering grades 5-8 and are designed to foster students' individual growth as readers and to mirror and build on MKA's Middle School English curriculum. Separate courses will be offered together for students entering grades five and six, and those entering grades seven and eight. Students will read and discuss a range of genres, including novels, short stories and poems; teachers will monitor student progress through reading conferences and writing activities. Students will learn to annotate texts for particular aspects of character development, which leads to a deeper understanding of conflict and theme, and to annotate their texts in a variety of ways.



Writing courses are taught from 10:30 a.m. – 12:30 p.m.

Grades 5-6 (Session I only) and grades 7-8 (Session II only)

The two-week Writing courses are offered for students entering grades 5-8 and are designed to foster students' individual growth as readers and writers and to mirror and build on MKA's Middle School English curriculum. Separate courses will be offered together for students entering grades five and six and those entering grades seven and eight. Careful attention to all stages of the writing process allows students to focus on revising and refining writing and honing their craft in targeted creative and expository genres, including analytical writing. Students will focus on the fundamentals of good paragraph writing, including main idea, supporting details, leads, conclusions and grammar.



Advanced English Skills course is taught from 8:30 a.m. – 12:30 p.m.

Grades 9-10 (Session III only)

Students in this course will explore critical reading and analytical writing through a curriculum that mirrors and builds on MKA's Middle and Upper School curricula. A variety of self-selected and whole-class literature provides students with sources and models for writing, and students will learn reading strategies to help them understand the nuances of various texts, which may include novels, short stories, poems and essays. Literary elements will also be studied and discussed. Students will construct and refine effective sentences and focused paragraphs into coherent essays. In addition, students will develop a fundamental understanding of standard English grammar through instruction and exercises.

Integration with STAR Camp: Students are welcome and encouraged to participate in STAR Camp's afternoon activities – please contact STAR Camp Director Amy Pacifico at 973-233-3001 to discuss course selection and fees.

Mathematics:

Math Skills: 8:30 – 10:30 a.m. & 10:30 a.m. – 12:30 p.m.

Grades 5-6 (Session I only)

Students develop problem-solving skills through hands-on, lab-type investigations. Applying acquired concepts and skills to real-life situations is an integral part of the curriculum.

Students study number, numeration and order relations. They learn how fractions are linked to repeating decimals and extend their knowledge of powers and roots. They work with measures and measurement in all aspects of this topic, including the surface areas and volumes of regular polyhedrals and spheres. In studying data analysis and statistics, students gather and interpret data, investigate quartiles and determine measures of central tendency.

Students develop their knowledge of inverse grouping symbols, estimates, mental arithmetic and procedures within decimals and fractions, rules for integers, prime and composite numbers, prime factorization, divisibility rules, exponent notations, and the meaning, equivalents and uses of rates, ratios, proportions and percentages. They also learn procedures for operations with powers and roots.

Pre-algebra Skills: 8:30 – 10:30 a.m. & 10:30 a.m. – 12:30 p.m.

Grades 6-8 (Session II only)

Pre-algebra students begin the upper-level mathematics sequence working with variables to develop key mathematical skills, including order of operations, powers and square roots. The study of patterns evolves from recognizing, describing and making generalizations from patterns. Students extend their understanding of the number system to include integers, rational and irrational numbers, and negative exponents. Problems based on the powers of ten and scientific notation provide ample opportunities to use scientific calculators, required for this course. Students explore the link between verbal models and symbolic algebraic models and use these models to solve multi-step equations and inequalities. They make connections to geometry as they use formulas and variables to describe the perimeter and area, surface area and volume for various geometric figures. Students examine transformations in the coordinate plane, further solidifying the relationship between algebra and geometry.

Algebra Skills in Preparation for Algebra II Honors: 8:30 a.m.– 12:30 p.m. Grades 6-8 (Session III only)

This course is designed for students to review important Algebra I skills, practice those skills in advanced settings and preview Algebra II Honors skills. Students will also explore techniques of factoring, graphing parabolas, solutions of quadratic equations, and the algebraic properties of powers, roots, and exponents. In addition, students will begin to learn how to graph equations by finding x and y intercepts and by understanding how coefficients and other constants transform parent functions into the given function.

Students must provide a graphing calculator for this course.

TO REGISTER ONLINE FOR SUMMER SKILLS, VISIT:

summer.mka.org

Mathematics Courses for Credit:

The following mathematics courses are for credit and taught from 8:30 a.m. – 12:30 p.m. and run all six weeks.

Please note that students who take classes taught for credit must fulfill the 120-hour course requirement. Students who wish to earn credit in these courses must complete the course work in the allotted hours. It is the responsibility of parents or students who wish to miss class time for non-medical reasons to contact their school districts to determine if they may miss class time, as MKA notifies all receiving schools of the number of hours completed in addition to the grade earned in the course. MKA assumes no responsibility for students who do not fulfill individual school or district attendance policies.

Pre-algebra (Grades 6-8)

Pre-algebra students begin the upper-level mathematics sequence working with variables to develop key mathematical skills, including order of operations, powers and square roots. The study of patterns evolves from recognizing, describing and making generalizations from patterns. Students extend their understanding of the number system to include integers, rational and irrational numbers, and negative exponents. Problems based on the powers of ten and scientific notation provide ample opportunities to use scientific calculators, required for this course. Students explore the link between verbal models and symbolic algebraic models and use these models to solve multi-step equations and inequalities. They make connections to geometry as they use formulas and variables to describe the perimeter and area, surface area and volume for various geometric figures. Students examine transformations in the coordinate plane, further solidifying the relationship between algebra and geometry.

Algebra I (Grades 7-9)

Students extend the depth of their algebraic understanding in Algebra 1, which mirrors the course offered at MKA's Upper School. In this course, students learn the algebra of linear equations and inequalities, including probability concepts with algebraic fractions, and focus on graphing techniques, including the use of the graphing calculator. Students investigate the properties of systems of equations, polynomials and square roots. They study curvilinear functions, represented by exponential growth and parabolas, in the context of contemporary applications in science and personal finance. Students explore how to collect and analyze data for independent and dependent variables and determine best-fit lines and their equations in order to make predictions. Testing those predictions leads to an analysis of other variables involved.

Geometry (Grades 8-10)

Geometry, which is at the same level as the Geometry Honors course offered at MKA's Upper School, begins with an introduction to the terms and methods through which the field of Euclidean Geometry is developed, and students use these fundamental building blocks throughout the year to derive powerful theorems and develop an understanding of geometric concepts. They learn to compose formal proofs for the first time by using the paragraph, indirect and analytic formats, in addition to the traditional two-column form. Composing formal proofs promotes an understanding of the rigor required when working in a deductive system. Students apply Algebra 1 skills to solve challenging problems in a geometric context. Topics studied include triangles, quadrilaterals, circles and other polygons; congruent and similar figures; parallel and perpendicular lines; area, volume and surface area; and trigonometry. Students also explore conic sections.

Algebra II (Grades 9-10)

Algebra II, which is at the same level as the Algebra II Honors course offered at MKA's Upper School, includes the study of linear equations, linear data models, and linear relations. The study of matrices and matrix operations extends to the study of systems of linear equations and linear inequalities. Students explore techniques of factoring, graphing parabolas, solutions of quadratic equations, and the algebraic properties of powers, roots, and exponents. Other topics include synthetic division, the zeroes of higher degree polynomials, rational functions, exponentials, and logarithms. Fundamental counting principles, probability, conic sections, and trigonometry are introduced. Emphasis is placed on learning how to graph equations by finding x and y intercepts and by understanding how coefficients and other constants transform parent functions into the given function. Students must provide a graphing calculator for this course.

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ACADEMY

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June 26 through August 4

Learn more at summer.mka.org