

The MIST Academy Summer Institute

The MIST Academy Summer Institute (MASI) began in 2008 as part of the MIST Academy curricular program for avid students of mathematics. Feedback was tremendous, so we expanded our offerings and enrollment continues to grow. These programs are designed to be affordable for families looking for top-notch educational programs.

- **Who:** MASI classes are for **math** students (grades 3-12).
- **What:** Specialized classes designed to instruct, inspire, and motivate a high level of creative critical thinking.
- **When:** Two-week courses throughout June and July (into the first week of August), 2011 (one-week for rising third graders).
- **Where:** All Birmingham MASI classes are held at **1401 Montgomery Highway**, Suite 121 in the heart of Vestavia Hills. All Huntsville MASI classes are held at **room 050 of the Shelby Center at the UAH Campus**.
- **Why:** Because Alabama's top students can come together and achieve more in classes aimed at their strengths.

MASI Math Programs

MASI math classes cover age/grade levels from students entering the 3rd grade all the way up to those well into high school mathematics. Each class is a two-week, half-day program (Mon-Fri) that includes a total of 30 hours of activities and instruction. The curriculum for each of our 9 distinct levels is designed to help students develop problem solving skills while giving them a leg up in curriculum they will see in class at school during the upcoming school year (and beyond).

Instructors for the MASI math programs include

- **Mathew Crawford** – MIST Academy Executive Director, gifted math textbook author, and a past national math team champion. Mr. Crawford serves as the instructor for the Introductory C, Intermediate A & B, and Advanced classes in Birmingham as well as the head curriculum developer for all programs.
- **Emily Brasher** – Twenty years of experience heading the gifted programs at Vestavia West Elementary School. Mrs. Brasher now runs the Math Explorers programs at MIST Academy and helps to formulate much of the curriculum.
- **Dr. Julie Ryle** – Dr. Ryle earned a PhD in Mathematics from the University of Alabama and joined the MIST Academy staff this Spring. Dr. Ryle acts as head instructor for the Introductory A and B classes.
- **Sergei Sarkisov** – Mr. Sarkisov is a UAH graduate whose research includes physical laser applications. He was a qualifier for the prestigious USA Mathematical Olympiad and a member of the U.S. Physics Olympiad Team. Mr. Sarkisov is currently the instructor for all Huntsville classes.

Included in our course listings are the recommended grade levels of students entering school during the **2010-11** school year. Remember that **all MIST Academy students excel in class**. Your child may be several years ahead in math relative to their peers in school, but our curriculum takes this into account in most cases. Instructors are available to interview students new to MIST Academy programs to best place each student in a class – students will be moved ahead in our class system in exceptional circumstances. Also, note that in some cases the subject matter of the course replaces the grade level of the student. **Tuition for each course is \$600 (except Explorers A, which is \$300) and is due prior to the start of course.**

Most of the Pre-Algebra and Algebra classes are based on the Art of Problem Solving's Introduction to Algebra text. The Geometry class will use the Art of Problem Solving's Introduction to Geometry textbook. The Intermediate B class will use the Art of Problem Solving's Intermediate Algebra textbook co-authored by the course instructor.

The price of each textbook is included in tuition. Please let us know if you already own the textbook for the class in which your child is enrolling and we will reduce tuition by \$40.

The Birmingham schedule for 2011 MASI math programs is as follows:

Class	Grade/Subject Level	Dates	Time
Math Explorers A	3 rd Grade	July 25-29	9AM-noon
Math Explorers B	4 th Grade	July 11-15/18-22	9AM-noon
Math Explorers C	5 th Grade	June 6-10/13-17	9AM-noon
Introductory A	6 th Grade	June 20-24/June 27-July 1	9AM-noon
Introductory B	Honors Pre-Algebra	June 6-10/13-17	9AM-noon
Introductory B	Honors Pre-Algebra	July 11-15/18-22	9AM-noon
Introductory C	Honors Algebra	June 6-10/13-17	1PM-4PM
Introductory C	Honors Algebra	July 11-15/18-22	1PM-4PM
Intermediate A	Honors Geometry	June 20-24/June 27-July 1	1PM-4PM
Intermediate A	Honors Geometry	July 25-29/Aug 1-5	9AM-noon
Intermediate B	Algebra II & Complex #'s	June 20-24/June 27-July 1	6PM-9PM
Intermediate B	Algebra II & Complex #'s	July 25-29/Aug 1-5	1PM-4PM
Advanced	Number Theory	June 6-10/13-17	6PM-9PM

Here is a rough curricular outline of MIST Academy programs

- **Math Explorers** – MIST Academy’s program for avid elementary school math students. The philosophy of this program is, as the name implies, highly exploratory. Students explore the use of new and old mathematical tools to make amazing discoveries.
- **Introductory** – Students learn the basics of algebra, geometry, number theory, combinatorics, probability, mathematical modeling, and more. Students are also introduced to math competitions such as MATHCOUNTS and the AMC 8. Most of MIST Academy’s middle school math students work at this level.
- **Intermediate** – Students already familiar with the introductory curriculum dig deeper into mathematics, learning to solve problems that require deeper modeling, more steps, and more areas of mathematics at once. Features of basic proof writing and fundamentals of research are taught at this level.
- **Advanced** – Students are ready to establish rigorous principles of mathematics. Involves a great deal of proof writing and high level problem solving.

For more information about our programs, please contact us at (205) 834-7514, email us at classes@mistacademy.com, or visit us on the web at www.mistacademy.com.

Huntsville Math Programs

All Huntsville MASI courses will be taught by Mr. Sarkisov.

The Huntsville schedule for 2011 MASI math programs is as follows:

Class	Grade/Subject Level	Dates	Time
Introductory B	Honors Pre-Algebra	July 25-29/Aug 1-5	9AM-noon
Introductory C	Honors Algebra	July 11-15/18-22	9AM-noon
Intermediate A	Honors Geometry	June 6-10/13-17	9AM-noon
Intermediate B	Algebra II & Complex #'s	June 20-24/June 27-July 1	9AM-noon

The classes listed recommend grade levels of students entering school during the **2011-12** school year. Remember that **all MIST Academy students excel in class**. Your child may be several years ahead in math relative to their peers in school, but our curriculum takes this into account in most cases. Instructors are available to interview students new to MIST Academy programs to best place each student in a class – students will be moved ahead in our class system in exceptional circumstances. Also, note that in some cases the subject matter of the course replaces the grade level of the student. **Tuition for each course is \$600 (except Explorers A, which is \$300) and is due prior to the start of course.**

Most of the Pre-Algebra and Algebra classes are based on the Art of Problem Solving's Introduction to Algebra text. The Geometry class will use the Art of Problem Solving's Introduction to Geometry textbook. The Intermediate B class will use the Art of Problem Solving's Intermediate Algebra textbook co-authored by MIST Academy Executive Director Mathew Crawford.

For more information about our programs, please contact us at (205) 834-7514, email us at classes@mistacademy.com, or visit us on the web at www.mistacademy.com.

MASI Schedule Summary

The following is the MASI Schedule for all programs, sorted by session (program date):

Class	Grade/Subject Level	Dates	Time
<u>Session I:</u>			
Math Explorers C	5 th Grade	June 6-10/13-17	9AM-noon
Introductory B	Honors Pre-Algebra	June 6-10/13-17	9AM-noon
Introductory C	Honors Algebra	June 6-10/13-17	1PM-4PM
Advanced	Number Theory	June 6-10/13-17	6PM-9PM
Intermediate A (H)	Honors Geometry	June 6-10/13-17	9AM-noon
<u>Session II:</u>			
Introductory A	6 th Grade	June 20-24/June 27-July 1	9AM-noon
Intermediate A	Honors Geometry	June 20-24/June 27-July 1	1PM-4PM
Intermediate B	Algebra II & Complex #'s	June 20-24/June 27-July 1	6PM-9PM
Intermediate B (H)	Algebra II & Complex #'s	June 20-24/June 27-July 1	9AM-noon
<u>Session III:</u>			
Math Explorers B	4 th Grade	July 11-15/18-22	9AM-noon
Introductory B	Honors Pre-Algebra	July 11-15/18-22	9AM-noon
Introductory C	Honors Algebra	July 11-15/18-22	1PM-4PM
Introductory C (H)	Honors Algebra	July 11-15/18-22	9AM-noon
<u>Session IV:</u>			
Math Explorers A	3 rd Grade	July 25-29	9AM-noon
Intermediate A	Honors Geometry	July 25-29/Aug 1-5	9AM-noon
Intermediate B	Algebra II & Complex #'s	July 25-29/Aug 1-5	1PM-4PM
Introductory B (H)	Honors Pre-Algebra	July 25-29/Aug 1-5	9AM-noon

Note: Courses denoted with (H) are held in Room 105 of Shelby Center at UAH in Huntsville. All other classes will be held at 1401 Montgomery Highway, Suite 121 in Vestavia Hills.

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