

GREATER NEW YORK ACADEMY

**41-32 58th Street
Woodside, NY 11377
(718) 639-1752**

MATH A/B COURSE SYLLABUS

Fall 2006 - Spring 2007

GENERAL INFORMATION

Instructor:	Mrs. S. Bailey
Required Text:	New York Math A/B- Volume 2: Prentice Hall
Length of Course:	2 Semesters
Prerequisite:	Math A
Class Materials:	Textbook, Notebook, Loose Leaf, Graph Paper, Scientific Calculator, Pens (black or blue ink only), Pencils, Ruler and the previous class' assignment.

COURSE OVERVIEW

This course is the third semester of Math A, and the first semester of Math B. The primary emphasis of this course is geometry. Algebra, statistics, probability, and trigonometry are also woven in for a more integrated approach. At the end of this course students are expected to understand these concepts and become mathematically confident. Students will also be able to take and pass the Math A Regents in January of next year.

GENERAL GOALS

- Gain an understanding and appreciation for God, the Creator, who is orderly, precise, and infinite.
- Develop spiritual values by emphasizing Christian principles in mathematical applications.
- Become skillful and confident in their ability to perform, communicate, and connect mathematics.
- Develop reasoning, problem solving, and critical thinking skills.

- Acquire an appreciation for mathematics.
- Select and use appropriate technology.

COURSE OUTLINE

Semester 1

September 6 - 29

Algebra Review (at the front of the textbook NY18 – NY 48)

- **Test on Algebra Review**

October 2 - 13

Tools of Algebra: using patterns, points, lines, and planes, measuring angles and segments; exploring construction of angles, line bisectors, angle bisectors.

- **Test on Chapter 1**

October 16 - 27

Investigating Geometric Figures: triangles, polygons, classifying quadrilaterals, congruent and similar figures.

- **Test on Chapters 1-2**

October 30 – November 10

Transformations: Shapes in Motion- reflections, matrices, translations, rotations, compositions of reflections, symmetry, tessellations, and dilations.

- **Test on Chapters 1-3**

THANKSGIVING BREAK

November 14 – December 1

Triangle Relationships: isosceles triangles, midsegments of triangles, triangle inequalities, bisectors and locus, other special triangles.

- **Test on Chapters 1-4**

December 4 - 22

Measuring in the Plane: understanding perimeter and area of parallelograms, triangles, trapezoids, regular polygons; areas of circles, sectors, and segments of circles.

- **Test on Chapters 1-5**

CHRISTMAS/NEW YEAR BREAK

January 3 - 19

Measuring in Space: Surface area of prisms and cylinders; volume of prisms, cylinders, cones, and spheres.

END OF SEMESTER EXAM AND MATH A REGENTS

Semester 2

January 29 – February 9

Reasoning and Parallel Lines: exploring parallel lines and related angles, proving lines parallel, constructing parallel and perpendicular lines, perspective drawing, spherical geometry.

- **Test on Chapter 7**

February 12 – March 2

Proving Triangles Congruent: SSS, SAS, ASA, AAS, congruent right triangles, using congruent triangles in proofs, using more than one pair of congruent triangles.

- **Test on Chapters 7-8**

March 5 - 16

Quadrilaterals: properties of parallelograms, proving that a quadrilateral is a parallelogram, properties of special parallelograms, trapezoids and kites, organizing coordinate proofs, using coordinate geometry in proofs.

- **Test on Chapters 7-9**

March 19 - 30

Similarity: ratio, proportion, and similarity. Proving triangles similar(AA, SAS, SSS). Similarity in right triangles. Proportions and Similar triangles. Perimeters and areas of similar figures. Areas and Volumes of similar solids.

- **Test on Chapters 7-10**

April 2 - 27

Right Triangle Geometry: the tangent ratio, the sine and cosine ratios. Angles of elevation and depression. Vectors and trigonometry. Adding Vectors. Trigonometry and Area.

- **Test on Chapters 7-11**

April 30 – May 11

Chords, Secants, and Tangents: circles in the coordinate plane, properties of tangents, properties of chords and arcs, inscribed angles, angles formed by chords, secants and tangents, circles and lengths of segments.

- **Test on Chapters 7-12**

END OF YEAR EXAMINATION 2007

GRADING POLICY

Tests	30%
Classwork	30%
Quizzes	20%
Homework	20%

Letter	Percentage	Letter	Percentage
A	93-100	C+	76-78
A-	89-92	C	73-75
B+	86-88	C-	69-72
B	83-85	D+	66-68
B-	79-82	D	63-65
		F	Below 63

DATES AND DEADLINES

These will be stated when the assignment is given. Homework is usually due the next scheduled class and should be done on loose leaf. Classwork is due at the end of the class period. Otherwise, assignments are due on the dates set or agreed upon by the teacher and students.

COURSE REQUIREMENTS

1. Points will be subtracted from work submitted after due dates.
2. Quizzes are usually given at the middle of each chapter.
3. All students must be present for and sit all exams given. Make-up tests will be given after school for absentees with a doctor's note or a note from parent/guardian. This must be done within the first two (2) days of return to school. All tests missed and not made-up will receive a zero grade.
4. All homework will be deposited in the "homework bin" upon entering the classroom.

5. Students are required to keep legible and neat notes, as there will be a notebook check during and at the end of each nine-week marking period.
6. Headings: must be at the top of your assignment. Also it must have the:
 - i. first and last name
 - ii. date the assignment was given
 - iii. subject/class
 - iv. assignment category
 - v. page of the assignment

Example:

- i. Stacy Bailey
- ii. September 6, 2006
- iii. Math A/B
- iv. Classwork/Homework/Quiz/Test
- v. Page 28: #2,6,12,24

CLASSROOM REGULATIONS

1. Each student is expected to familiarize himself/herself with all school policies in the Greater New Academy Bulletin and follow them.
2. Students should be punctual for class at **ALL** times.
3. In order to maintain an atmosphere conducive to learning students should refrain from talking, walking aimlessly around the room and engaging in disruptive classroom activity.
4. Upon entering the classroom, take your seat, and start on the “Do Now” on the board under your class name (Math A/B).
5. Students are not to call out answers but to raise his/her hand to be recognized by the teacher.
6. When the bell rings signaling the end of class, all students are to remain seated until dismissed.

CLASS PREPARATION AND DEPORTMENT

- **ABSOLUTELY NO EATING ANYTHING IN CLASS (GUM, MINTS, CANDY, FOOD, DRINKS, ETC.)**
- **WEAR PROPER UNIFORM TO ENTER THE CLASSROOM**
- **LEAVE WORK AREA AROUND CHAIR CLEAN**
- **BRING TEXTBOOKS, NOTEBOOKS, LOOSE LEAF, AND CALCULATOR TO CLASS EVERYDAY**
- **ALWAYS BE COURTEOUS, KIND, AND RESPECTFUL**

- **CARRY A CONFIDENT, SUCCESSFUL, CHRISTIAN ATTITUDE TO CLASS**

*HAVE A WONDERFUL AND SUCCESSFUL SCHOOL YEAR AND
REMEMBER,
“I CAN DO ALL THINGS THROUGH CHRIST WHO STRENGTHENS
ME.”
Philippians 4:13*