Mrs. Kelin
tenisbum29@aol.com
Geometry
2025/2026

Geometry Overview and Syllabus

Geometry is a course that strengthens a student's ability to reason logically. It delves into the relationships between various shapes, angles, and measurement. It also incorporates some Algebra I into these relationships. This year we are melding a larger portion of Algebra I into the curriculum, namely the main skills of the latter portion of the Algebra I standard course. This combined course will cover many topics, including:

- Basic definitions, such as point, line, plane, angle, segment, ray
- Postulates, theorems
- Using deductive reasoning
- Conditionals, converse, inverse, contrapositive
- Parallel, perpendicular lines
- Pairs of angles
- Triangle congruence
- Proofs (light coverage)
- Quadrilaterals (parallelogram, square, rectangle, trapezoid)
- Inequalities in triangles
- Indirect proofs
- Similarity – triangles, polygons
- Right triangles – special, regular
- Circles – angle relationships, arcs, chords, tangents
- Locus of points
- Areas of plane figures
- Geometric probability (time permitting)
- Areas and volumes of Solids
- Coordinate geometry – distance formula, coordinate proofs (time permitting)
- Transformations – reflection, translation, rotation (basic concepts)
- Operations with exponents (multiplication, division)
- Radical expressions
- Polynomials – definition, operations with
- Factoring - multiple types
- Solving quadratic equations – multiple methods
- Statistics – basic terms, reading and interpreting graphs

A variety of teaching methods are used to meet the needs of all students. They include:
- Formal lecture involving note-taking
- Group work

Geometry/Algebra I (continued)

- Demonstrations of technique
- Student demonstration
- Guided practice
- Small projects

Basic Course Procedures/Expectations:

There is a lot of material covered in this course. Therefore, a certain pace needs to be followed. In order to maintain an appropriate level of achievement, homework is given on a regular basis and is expected to be completed. Assessments are made in the form of homework, notebook, quizzes, tests, semester exams, and periodic projects or long-term assignments. Notebooks are to be kept up to date. Tests are announced in advance so that students will have ample time to prepare for them. If a student is having trouble with any particular concept or simply needs some extra help, I am available after class or during lunch by arrangement, since times may vary. A student may also call me at home prior to 9:30 PM. In general, I can be reached through the school or via email at tenisbum29@aol.com. If a student is absent **only on the day a test is given**, she is required to take the test upon her return. If a student is absent for multiple days, a schedule of completion for missed work/test will be worked out. Keeping up on a regular basis and working consistently is the best formula for success in this course.

Daily Requirements:

Students should bring the following to class regularly:
- Math textbook
- Homework
- Binder or spiral notebook, folder, pencils, erasers, ruler
- Graph paper (have some handy, it is not used daily)
- Calculator – graphing calculator is recommended since it will carry you through the rest of high school and beyond. The TI-83 Plus or the TI-84 Plus is the preferred graphing calculator. (Can be purchased on ebay for much less than retail price.)

Grading System:

Using a test as the norm, a quiz is worth half a test, projects or long-term assignments are worth half a test or one-fourth of a test, depending on the depth of the project/assignment, and the semester exam is worth 1.5 tests. Homework/participation comprises one test (usually about 15% of a student's grade). If a borderline grade is obtained, the amount of effort put forth is the determining factor.