

Syllabus Geometry

Heritage Academy
A University-Model® School

The mission of Heritage Academy, a Certified University-Model® School, is to partner with Christian parents to prepare college-worthy, character witnesses for Jesus Christ.

I. Course Purpose and Content

This course will provide students with instruction related to two- and three-dimensional geometric figures, including lines, angles, triangles, quadrilaterals, circles, pyramids, and cylinders. This course will require students apply algebraic knowledge and skills to geometric problem-solving, thus strengthening students' abilities to formulate and analyze problems. Mastery of these concepts will build a strong foundation for logical thinking and problem-solving that will enable students to logically approach situations which occur in mathematics and also in daily life. Students will learn how to structure formal proofs through the use of deductive reasoning based on theorems and postulates.

Concepts addressed will include:

- The language of geometry including points, lines and planes, as well as properties of line segments and angles
- Formal logic, including inductive and deductive reasoning and formal, two-column proofs
- Congruent and similar shapes

Pre-requisites: Successful completion of Algebra 1.

II. Worldview Integration

Heritage Academy is committed to teaching all subjects in such a way that students develop a biblical worldview out of which to think and act. The peculiar excellence of mathematics is that its principles are demonstrable. "Experiments" correctly done can be done again and again. Because of this, we are reminded that God is a God of order (1 Cor. 14:33 & Rom 11:34). Mathematics is also a *tool* to help men take dominion over the earth (Gen 1:26). All callings in life demand planning, calculating, and evaluating in order to carry out one's responsibilities. Students should learn that math plays an important role in their lives; they should learn how it is used in such areas as business, medicine, engineering, art, science, linguistics, and economics. And they should master this wonderful gift to advance God's glory on earth. (Exodus Books)

III. Required Texts/Materials

Please reference *Required Text Book List* and *Course Supplies List* for the appropriate academic year to identify the textbooks and supplies students will need for this course. Both the Required Text Book List and Course Supplies List are accessible online.

IV. Course Guidelines/Student Responsibilities

A. Attendance

Attendance is imperative as concepts cannot be learned if a student is absent. Students are expected to attend class and contribute positively to the classroom environment.

Tardiness is disruptive to other class members. Please arrive on time and prepared. All absences and tardies are considered unexcused unless accompanied by a note from a parent or guardian. Please remember that three tardies generate one absence.

As communicated in Heritage Academy's Family Manual, a passing grade awarded at the end of the semester generally requires that a secondary student has attended at least forty-two class periods during the semester. Failure to meet this minimum attendance requirement may result in an F being awarded and recorded on the student's transcript.

B. Absences and Late Work

In the case of planned absence(s), homework that is due during the student's absence must be completed and submitted to the instructor in advance.

When a student is unexpectedly and unavoidably absent due to ill health, past-due assignments must be submitted within two course periods after the student's return to school. **When an unexpected absence must occur, please be sure to notify the school office and the instructor of the students' absence as quickly as possible, preferably before the involved class occurs. This contact may occur by phone or by email.**

Late work that is submitted simply "late" will be graded and penalized with a **ten percent grade reduction for each course period that it is late**; homework will not be accepted more than three course periods (1 week) past its due date, unless previous arrangements between the teacher and the student's parent have been agreed to in light of peculiar circumstances that are occurring beyond the family's control.

C. Student Conduct and Preparation for Learning

So that a classroom environment conducive for safety, focus, and learning may be maintained, each student is expected to conduct himself/herself in keeping with the following guidelines throughout the course of the semester

- 1) Arrive on time to each class period with the appropriate class materials available for access (e.g., organized notebook with dividers and filed materials, paper, writing tools, texts, and other tools as directed)
- 2) Arrive prepared to submit completed at-home assignments at start of each class period.
- 3) Arrive ready to listen, learn, take notes, and participate in teacher-directed classroom discussions and activities.
- 4) Ask for clarification or further explanation when a concept or direction remains unclear.
- 5) Demonstrate a spirit of cooperation, kindness, and respect toward the teacher and fellow classmates, in keeping with Heritage Academy's Code of Conduct.
- 6) Help keep the classroom area clean and orderly.
- 7) Cooperate with the parent-educator and the Heritage Academy teacher to complete homework in a timely fashion.
- 8) Communicate concerns regarding schoolwork to both the Heritage Academy teacher and the parent-educator, so that these concerns can be addressed quickly.
- 9) On the whole, conduct himself or herself in a manner that is worthy of Christ and reflects the life of the Holy Spirit in him/her: ". . . that you may live a life worthy of the Lord and may please Him in every way: bearing fruit in every good work, growing in the knowledge of God, being strengthened with all power according to His glorious might so that you may have great endurance and patience, and joyfully giving thanks to the Father, who has qualified you to share in the inheritance of the saints in the kingdom of light" (Colossians 1:12).

D. At-Home (Satellite Classroom) Investment

Homework is an essential component of any mathematics course. Consistent review of concepts and working of problems is critical for achievement of success and understanding. Home communication sheets will be given to students by chapters, therefore each communication sheet will cover 2 to 3 weeks of assignments. Student can expect to invest 2.5 to 4 hours each week in at-home completion of assignments.

Students will be responsible for completing all homework assignments on time and to the best of their ability and for submitting completed assignments to the teacher when they are called for in class, on the indicated due date. Homework that is submitted late or that is not ready to be turned in when called for will be considered late and graded accordingly.

On regular assignments, approximately five problems per assignment will be selected for grading. Partial credit may be given for completed but incorrect work.

Course assignments may include any of the following:

- **Review** of concepts or terms through study of notes or examples in the text.
- **Completion of math problems.**
- **Recording example problems and theorems in a notebook.**
- **Memorization:** formulas, definitions, scripture verses.
- **Maintaining a Course Binder:** Chapter Communication sheets, completed homework, tests, and class notes will be maintained in the student binder. A notebook or foldables (note taking format) will also be maintained and the grades for the notebook will be based on completeness and orderliness.
- Reference Heritage Academy's "Parent/Student Guidance for At-Home Math Assignments" which will be provided to students in class and provide a guide for moving forward if a "wall" is encountered on at-home days.
- **Preparation for Tests:** Students may be instructed to review notes, various texts, previously completed tests, scripture verses and/or to complete review questions and practice problem etc, in preparation for tests.
- **Dialog:** Students may be instructed to discuss and/or explore certain topics or concepts with a parent. These assignments will be given purposefully and should not be dismissed.
- **Other Assignments:** additional types of assignments may given throughout the semester at the discretion of the instructor.

NOTE: Work must be shown for every problem where it is required. Papers should **be neat and legible.** Pencil is preferred, but blue or black erasable ink is also allowed. Please use standard size 8 ½ by 11 notebook paper. A few problems from each assignment will be selected to be graded.

E. Assessments

Chapter tests will be administered 5 times during the semester. A comprehensive, two-hour semester exam will be given at the end of each semester, scheduled according to Heritage Academy's Final Exam schedule.

Grade Apportionment

Homework	20%
Tests	65%
Semester Exam	15%

Letter grades will be assigned according to Heritage Academy's determined grading scale:

100-95.... A	86-83 B	76-73.... C	69-60.... D
94-90 A-	82-80.... B-	72-70.... C-	59 or belowF
89-87 B+	79-77.... C+		

The semester grade that the student has earned by the end of each semester will be the semester grade that appears on the student's transcript. Semester grades are permanent and stand alone; they will not be averaged. To receive one half unit of high school credit each semester, and to maintain eligibility for promotion to the next course in Heritage Academy's math sequence, the student must earn a percentage grade of 70% or above (which translates to a letter grade of C- or above) and fulfill attendance requirements both semester.

V. Parent Responsibilities

A. Embracing the University Model®

University-Model Schooling at Heritage Academy is driven by two guiding principles:

- to preserve and strengthen God-ordained family relationships;
- to offer students the opportunity to achieve a high degree of academic excellence.

Heritage Academy operates as a University-Model School®, designed for families who want their students to flourish from a life anchored in the home yet still gain from the best aspects of traditional, classroom education. Courses offered at Heritage Academy occur every-other-day so that students may realize the benefits of qualified teachers and a focused learning community, yet continue to experience home as the primary, consistent base where parents remain their foremost guides for spiritual, social, academic, and character formation.

Parents, please consider ways you may maximize the benefits University-Model Schooling offers to your family. How can you as parents utilize the at-home study time this model provides to nurture deeper relationship and impart the faith, values, and life-patterns you desire your student to embrace?

B. **Fulfilling the Parent Role**

Within the University-Model School®, **parents commit to fulfill a specified role related to each course** in which their student is enrolled, as prescribed by the course’s description. Each role identifies specific responsibilities that the teacher relies on the parent to perform, thus facilitating effective home/school partnership whereby students are assured of receiving needed support. For this course, Heritage Academy has designated parents the role of **“Guide for Dependent Study.”**

This role recognizes that many courses at this level will begin to cover subject matter that may be unfamiliar to many parents. At the same time, the student is at a dependent age where disciplined study habits must be developed, not by parental force, but through positive encouragement and through the student’s growing awareness of personal consequences. In order for this class to be successful, I as a teacher am depending upon you as parents to ensure that your son or daughter keeps up with the course material and to communicate with me should any difficulties or concerns arise.

C. **Monitor Gradelink and View Seven-Week and Thirteen-Week Gradelink Reports**

As your student earns grades for completed tests, quizzes, and various projects and homework assignments, these will be recorded on **Gradelink.com** for you to view at your convenience. My general goal will be to post grades online within a week of their being awarded.

In Gradelink, missing assignments will also be noted. Please take time to follow your student’s progress on Gradelink so that you can quickly recognize and explore/address areas of patterns of difficulty or concern that may appear and affirm positive accomplishments.

Gradelink Reports, which will include parent-directed comments related to your student’s behavior and progress in class, will be ready for parents to view at the seven-week and thirteen-week point in the semester.

Please contact the office if you have not received your Gradelink login information.

D. **Parent/Teacher Fellowship**

I hope you will take time to come to Parent/Teacher Fellowship scheduled during the 7th week of each semester. This will give you and I brief opportunity to connect face-to-face and discuss your student’s progress, making the most of the partnership that is so vital to students’ success within the University Model®.

VI. **Contacting the Instructor**

Teacher contact information will be provided on the weekly communication sheets that will be distributed in class; it may also be found in the school directory.