



K-12
TEXAS TECH

Geometry A v8.0 – Syllabus

Course Name

GEOM-A
Geometry A v8.0

Course Information

GEOM-A is the first semester of this two-semester course.

One day in 2580 B.C.E., a very serious architect stood in a dusty desert with a set of plans. His plans called for creating a structure 480 feet tall, with a square base and triangular sides, using stone blocks weighing two tons each. The Pharaoh wanted the job done right. The better this architect understood geometry, the better his chances were for staying alive.

Geometry is everywhere, not just in pyramids. Engineers use geometry to build highways and bridges. Artists use geometry to create perspective in their paintings, and mapmakers help travelers find things using the points located on a geometric grid. Throughout this course, students travel a mathematical highway illuminated by spatial relationships, reasoning, connections, and problem solving.

Course Delivery Method

Online

Contacting Your Instructor

You may contact your instructor using your Canvas Inbox. Technical support is available 24/7 at [TTU K-12](#).

Course Topics

After completing this course, the students should have increased knowledge of:

- Geometry Foundations (Definitions, Constructions, and Proofs)
- Transformations and Congruence
- Dilations and Similarity

Textbook and Materials

No textbooks required. All content is within Canvas.

Materials

- Scientific Calculator

- Plenty of paper for computer printing
- 1—two inch, three-ring binder to serve as your Geometry notebook
- 1—set of subject separators/tabs for your notebook, one for each module
- 1—a folder on your hard drive to save your assignments (or a USB drive or cloud-based service)
- Protractor
- Compass
- A tape measure for some project type assignments.
- Tissue paper or wax paper for some activities.
- Index Cards
- Graph paper (optional)

Technical Requirements

- Internet access – preferably high speed (for accessing Canvas)
- browser (we recommend Chrome)
- supported browser plugins and settings
The following plugins and settings may be required to use our courses.
 - JavaScript enabled
 - Cookies enabled
 - Java installed
- Email
- Printing capabilities
- Adobe Reader (download from [Adobe](#))
- Audio and video capabilities (for watching/listening to course content)
- PDF app (free options available)

Technical Skill Requirements

Be comfortable with the following:

- accessing online learning materials via Canvas
- Internet search engines and browsers (we recommend Chrome)
- uploading assignments into Canvas (there will be instructions for uploading assignments)

Course Pacing

This course is designed to be completed in 18 weeks.

- Print this guide and use a calendar to fill in your goal dates for completing each Module.
- Note that you must have a grade of 70 or above on a Discussion-Based Assessment (DBA) in order to continue moving forward in the course. DBAs occur every other lesson.
- To achieve success, students are expected to submit work in each course weekly.
- Students can learn at their own pace; however, "any pace" still means that students must make progress in the course every week.

- Post the pace guide in a place where you and your Parent or Guardian will see it every day (on the refrigerator or next to the computer). Give yourself a check every time you complete a task and celebrate your efforts!

Weeks	Lessons	Due Date (you write this in)
1	Checkpoint 1 00.00 Getting Started 01.00 Introduction to Geometry Foundations 01.01 Basics of Geometry	
2	01.02 Basic Constructions 01.03 Advanced Constructions	
3	01.05 Geometry Foundations Activity 01.06 Introduction to Proofs	
4	01.07 Line and Angle Proofs 01.09 Geometry Foundations Review and Practice Test 01.04 Geometry Foundations Discussion-Based Assessment	
5	*01.10 Geometry Foundations Test Part One *01.10 Geometry Foundations Test Part Two	
6	02.00 Introduction to Transformations and Congruence 02.01 Translations and Reflections	
7	02.02 Rotations 02.03 Rigid Motion and Congruence	
8	02.04 Triangle Proofs 02.05 Transformations Congruence Activity	
9	02.06 Quadrilateral Proofs 02.08 Transformations and Congruence Review and Practice Test	
10	Checkpoint 2 *02.10 Transformations and Congruence Test Part One	
11	*02.10 Transformations and Congruence Test Part Two 03.00 Introduction to Dilations and Similarity 03.01 Dilations	
12	03.02 Similarity 03.03 Triangles and Similarity	
13	03.05 Triangle Congruence and Similarity 03.06 Applications of Congruence and Similarity	
14	03.08 Dilations and Similarity Quiz	

Weeks	Lessons	Due Date <i>(you write this in)</i>
15	Checkpoint 3 03.07 Dilations and Similarity Discussion-Based Assessment	
16	*Final Exam Part 1 *Final Exam Part 2	
17	Floating Vacation Week	
18	Floating Vacation Week	

Course Credit

Your grade will be calculated as follows:

- formative assessments (50%)
- summative assessments (20%)
 - 01.10 Geometry Foundations Test Part One
 - 01.10 Geometry Foundations Test Part Two
 - 02.10 Transformations and Congruence Test Part One
 - 02.10 Transformations and Congruence Test Part Two
- summative final exam (30%)

Assignments are labeled as “summative” or “formative” under Grades in Canvas.

Course Completion and Extensions

- Students may not complete the course in less than 30 days.
- All courses expire 180 days after the enrollment date.

Academic Integrity

It is the aim of the faculty of Texas Tech University to foster a spirit of complete honesty and high standard of integrity. The attempt of students to present as their own any work not honestly performed is regarded by the faculty and administration as a most serious offense and renders the offenders liable to serious consequences, possibly suspension.

“Scholastic dishonesty” includes, but is not limited to, cheating, plagiarism, collusion, falsifying academic records, misrepresenting facts, and any act designed to give unfair academic advantage to the student (such as, but not limited to, submission of essentially the same written assignment for two courses without the prior permission of the instructor) or the attempt to commit such an act.

Artificial Intelligence (AI) Use Policy

This policy covers any generative AI tool, such as ChatGPT, Elicit, Photo Math, etc. This includes text and artwork/graphics/video/audio, etc.

All work submitted in this course must be your own. You may not use artificial intelligence tools to complete your assignments in this course.

If an instructor suspects that an assignment is not the work of the student, it will receive a score of zero. The instructor will message the student or provide feedback on the assignment indicating the need to schedule a one-on-one video conference, during which the student will be required to demonstrate their skills or knowledge through an alternative or mutually agreed-upon assignment. The grade of the alternate or agreed upon assignment will be determined at the instructor's discretion with the highest possible score being 70%.

If it is determined that a student has violated final exam directions on Final Exam A or CBE Set 1, the exam will be scored as zero. The student may take Final Exam B or CBE Set 2 with the highest possible score being 70%.

The incident will be reported to Texas Tech K-12 Administration and documented in the student's file. Continued violations of Texas Tech University's Academic Integrity Policy will result in the removal of the student from the program.

Student/Parent Expectations

You will be expected to log into the Canvas course regularly to be aware of possible announcements/reminders and to pace your student's progress in the course.

The following are prohibited while using the Canvas interface:

- spamming;
- hacking; and
- using TTU or Canvas email for commercial purposes;

Inappropriate behavior shall result in consequences ranging from a request to correct the problem, to removal from the course or even the university, depending on the severity of the behavior. Disciplinary actions will be taken according to the TTU K-12 Student Handbook.

Communication

- You can expect a reply from your instructor within 2 business days.
- Use the Canvas Inbox for sending messages to your instructor.

Submitting Assignments

You will submit all assignments through Canvas, rather than by mail or email.

Technical Difficulties

Getting Help

For student assistance with Canvas, visit [TTU K-12 Support](#).

Computer Problems

A working computer is necessary for online coursework. Computer problems will not be accepted as a valid reason for failure to complete course activities within the allotted time frame. Identify a second computer, before the course begins, that you can use if you experience computer problems.

Server Problems

When the Canvas server needs to be taken down for maintenance, the Canvas administrator will post an announcement in your course informing you of the time and date. If the server experiences unforeseen problems, your course instructor will notify you.

Lost or Corrupted Files

You must keep/save a copy of every project/assignment on an external disk or personal computer. In the event of any kind of technology failure (e.g., Canvas server crash or virus infection, students' own computer problems, loss of files in cyberspace, etc.) or any disputes, the instructor may request or require you to resubmit the files. In some instances, the instructor may need to open another attempt within Canvas, so communication with your instructor is critical in these circumstances.