GEOMETRY Vine Academy, 2022 – 2023 Course Description Mr. R. Harvey, instructor

Course description: A foundation for geometry is laid through the introduction of undefined terms, definitions, and incidence theorems. Subsets and measurements are covered. Logic is introduced as a basis for proofs. Other topics covered are area, circles, space, volume, transformations and symmetry, and similarity. The course concludes with an introduction to trigonometry. Curriculum Materials:

- 12" ruler graduated to 1/16" at least.
- Protractor, graduated at least to 1 degree (180 deg. or half circle should be adequate)
- Compass, the maximum radius should be about 4"
- 200-300 sheets of graph paper 1/4" x 1/4" or 1/5" x 1/5"; 2-300 sheets of lined notebook paper
- Graph-ruled composition notebook; instructor has; do **not** buy
- \$5 copy fee (payable in first week of class); includes notebook
- Text BJU Press Geometry 3rd edition; https://www.bjupress.com/product/281592
- sufficient supply of #2 pencils OR blue or black ink pens
- at least two other colored pens or pencils (i.e. red and blue and black) for notes
- https://www.youtube.com/watch?v=HmKzTLjddmQ

This is a hard course. You are required to learn stuff in this course that will be useful in life. You should have the times table through 12 and squares through 25 memorized.

Legible penmanship is required; if I can't read it, it's wrong. PERIOD.

Do NOT hand in a list of answers that are unsupported by work. Anybody can copy answers so don't do it. Such homework is unacceptable, and results in zeros. Tests and quizzes also must have work. Make sure you do the homework entirely. DO NOT COPY OTHERS' WORK, as this also results in zeros.

Tests will happen 2-3 weeks apart. This schedule will flux as we work through the material.

Prior to every day's instruction **read the next section**, take notes asks questions.

Classroom Instruction: I'll write homework assignment for the day's lesson on board. I'll take questions on the previous homework. I'll: give the day's lesson (you'll take notes in notebook), then work selected homework questions (you'll take more notes); then collect homework.

Homework: Graded on a 10-point scale; due the next class period (allowances will be made for an assignment prior to a test); turned in before the test on the chapter. After that, score stands.

Chapter Tests: 100 pts; full class period. Generally, tests are given Friday the week after a chapter's review assignment. I will grade and return tests the next class period with solutions. If you do miserably on a test, i.e., <65%, a second chance can be arranged. Second chance will be same test, within a week, graded on a 11% off scale meaning that you cannot get an A on the 2nd-chance test, but you can get a B+ if you get it all correct. Second chance test cannot hurt grade, only help (i.e. I'll take the greater of the two scores). Cheat sheets ONLY on tests will be tolerated, even strongly suggested; see below.

Semester Finals: Cumulative on all material up to that point; 150 points each. No second chance on final. That's why it's called the FINAL. Generally, I don't do midterms.

Quizzes: 10-15 minutes. No second chance for poor quiz scores. 15 points each. Quizzes are unannounced and given first thing in class so don't be late. Cheatsheets generally not allowed.

Make up tests and quizzes for excused absences only.

Class participation: 5 pts/week all or nothing and subjective. No redress. Vine cell phone policy in force; no texting in class. Repeated tardiness is noted. Questions encouraged; and must connect with topic or general math sphere. I will ask questions of students, and they will answer with an appropriate response. Talking out of turn, talking not to me, singing, not tolerated. This category amounts to nearly two tests, so don't blow it. Occasional discussion on current events as relates to math encouraged; leads to project ideas. Bring text to every class. No singing.

Notebooks/Cheatsheets: Part of participation. Quadruled composition notebooks, available only from instructor at beginning of school year. PLEASE get them from instructor. These will be your classroom lecture notes. Also, they will be your *cheat-sheets* for tests. So, at the back you will write all formulas, theorems, and definitions so that they will be handy. All must be in your handwriting and should be your very best work. Keep up as the semester progresses and you will have the best shot at learning it well. Must be your own work, not photocopies.

Project (optional): One project for the academic year. Must involve some math learned in class. Topic must be approved by me prior to attempt. Cannot hurt grade; can only help. See me for suggestions.

Sample scoring (this is only a sample; actual results will be different):

Scoring			Grading (including project)
100 homework assts,	10 pts each.	1000	A: 91% to 100% 2912+
38 participation,	5 pts each.	190	B: 81% to 90% 2592 - 2911
14 chapter tests,	100 pts each.	1400	C: 70% to 80% 2240 - 2591
14 quizzes	15 pts each.	210	D: 59% to 69% 1920 - 2239
1 project	100 pts	100	F: other
2 final	150 pts	300	
TOTAL (3350 with	project)	3200	

You can see that, you can, but barely, pass on homework and quizzes. You must pass most of all the parts to get a B; if all you do is test and homework perfectly, you'll get 75% which is only a C; nobody has done this yet. The burden is on you to master the material. I will guide and explain, cajole, and encourage; you will do the homework and ask questions. Repeat until you get it.

Tutoring can be arranged at \$40/hr.

My cell phone is 408 313 6212. Texting preferred. Email is bobharveyassociates@gmail.com, though response time on emails can be delayed a few hours to one day or two.