

Advanced Geometry

Instructor: Jordan Erwin (he/him)
Free State High School
Room 518

Course Objectives:

- Engage in mathematical thinking
- Strengthen understanding of concepts prescribed by state math standards
- Collaborate with other students in a problem-solving setting
- Explore geometric ideas of visualization, description, and logical reasoning

Communication: You can always talk to me in person but if you are unable to reach me, please use the information below to get a hold of me.

Email: jordan.erwin@usd497.org

- I prefer students use this only when they need to send me an attachment or are unable to contact me through Schoology

Schoology Messenger

- I prefer students use this as the main form of communication

Course Description: All mathematics explores the quantifiable realities of our world. Geometry, specifically, looks to make sense of the world right in front of us by giving language to shape, structure, component, and property. It seeks to give clear definition to everything that we can observe. In Geometry, what do we want? To understand our world.

Supplies:

- Pencil and Pen
- Dry Erase Markers
- 1.5'' binder (or larger)
- Highlighter
- TI30X IIS Calculator (optional but recommended)
- Notebook
- iPad with charger and pencil

The Foundations: These comprise the cultural values of the classroom. They are our basic principles that guide our work and interactions. They are what we believe about ourselves and life and what we aspire to as a whole community of learners. Please read them and seek to live them out.

- Teamwork: Working together with respect and kindness
- Effort: Putting the time and work into accomplishing the goal
- Perseverance: Getting back up and pushing through and learning from difficulties and failures
- Character: Moral qualities distinctive to you that help us all function together, e.g., respect and kindness
- Goal-oriented: Having the mindset to move forward in what we need and want to do

Basic Policies:

- Attendance is required. All absences must be excused through the front office.
- No eating in the classroom, including after lunch (snacks are allowed on case-by-case basis).
- Water bottles and other drinks are allowed.
- Electronics, such as cellphones, computers and iPads, should be used for educational purposes during class time and put away otherwise. Repeated failure to comply with this policy will result in parent contact and school discipline.
- Remove all headphones and earbuds while working collaboratively and during assessments
- Help keep the classroom clean by picking up after yourself and treating the classroom materials and furniture with care



GEOMETRY
UNDERSTANDING OUR WORLD

Course Requirements:

1. Tests: 1 for each unit
2. Quizzes: Select units
3. Discussion Boards: Select units
4. IXL Skills: Select lessons
5. Final Exams: 1 each semester
6. Projects: Select units
7. Check Your Understanding Problems: 1 set for each lesson
8. Practice Problems: 1 set for each lesson

Grading:

- Your grade is determined by weighted points
 - o 70% Assessments & Projects
 - o 15% Practice
 - o 15% Final
- Assessments will be graded on a standard right-wrong basis with points for partial credit
- Projects will be graded using a provided rubric
- Practice work will be graded on effort and completion

WHAT DO WE WANT? TO UNDERSTAND OUR WORLD!

Course Procedures:

1. Assessments: There will be a test at the end of each unit and quizzes and projects will be given as needed. Assessments (except projects) must be completed in the classroom during the time that is given, unless prior arrangements are made with another approved school staff member. These will be handed directly to Mr. Erwin, unless specified otherwise. If you are absent, you have one week from your return to make up the assessment. If you request to retake a test, follow the procedure below
 - a. Turn in all assignments for the unit
 - b. Work with Mr. Erwin (or another approved staff member) to prepare
 - c. Make appointment with Mr. Erwin to retake test (preferably during ECT)
 - d. The retake test will be a different version and will replace the original score (even if it is lower)
2. Practice Problems: You will turn these into the Class Inbox when complete. I will not return these, but you may request feedback. In general, feedback (requested or not) will be given to you directly during the class time. Answer keys without worked-out solutions problems will be provided online.
3. Late Work: Due dates and deadlines will be clearly posted. If work is submitted late, student must notify Mr. Erwin when it is complete to receive credit. All work is due by the end of the unit from which it was assigned, unless otherwise arranged.
4. Attendance/Tardies: If you are absent, check Schoology. The FSHS attendance and tardy policies will be followed.
5. Tutoring: Tutoring is free and available Monday, Tuesday, and Thursday after school from 3:20 – 4:20pm in the library.
6. ECT: If you would like to work with or discuss anything with Mr. Erwin during ECT, please request a pass.
7. Notebooks: You are strongly encouraged to keep an organized notebook in a binder or a folder on your iPad.

Unit Calendar*		*subject to change
Unit 1 – Geometry Basics	Unit 7 – Similar Triangles	
Unit 2 – Logic and Proofs	Unit 8 – Trigonometry	
Unit 3 – Parallel and Perpendicular Lines	Unit 9 – Quadrilaterals	
Unit 4 – Transformations	Unit 10 – Circles	
Unit 5 – Triangles	Unit 11 – Surface Area and Volume	
Unit 6 – Triangle Congruence		

All information described in syllabus is subject to change for the good of the course and the students. Any further questions can be directed to Mr. Erwin.

What Makes It Advanced?

It is important to know the expectations for any course you take. It is helpful to know what you are walking into so you know how to be prepared and how to be successful. The information above in the syllabus should give you a view of the expectations of the course. In addition, as this is an advanced course, it is important to note not just what to expect from it but what will be expected from you. In Advanced Geometry, I will operate under the assumption that you are an above average student in but not limited to the areas of:

- Arithmetic and Algebraic Proficiency
- Organization
- Focus and Determination
- Time Management
- Critical Thinking and Problem Solving

Having said that, no one is perfect. We are all learning. You do not have to walk into the classroom with advanced skill in each of those areas to be successful. But it is necessary to have the intention of utilizing and growing in each of those areas. It is also necessary to understand that I am expecting more from students in this course than if they are not in the advanced course. Some other expectations to have about the advanced course are but not limited to:

- Quicker pace
- More in depth study and exploration of concepts
- Study of more material than standard course
- More practice work and more challenging assessments

The advanced course is meant to prepare students for the demands and mathematics of future advanced courses in Algebra 2, College Algebra, AP Pre-Calculus, AP Calculus, and AP Statistics. None of this is meant to frighten anyone away from this course and the work involved, only to set proper expectations. The opportunity for success is open to everyone. If you have other questions or concerns, please contact me.