|  |  |  |
| --- | --- | --- |
|  | *Fairfield Ludlowe High School - Fairfield Warde High School*  **GEOMETRY 21** | |
| Mrs. Meyers | Room 328 |
|  |  |
| smeyers@fairfieldschools.org | |
| COURSE DESCRIPTION | | |
| The fundamental purpose of the course in Geometry is to formalize and extend students’ geometric experiences from the middle grades. Students explore more complex geometric situations and deepen their explanations of geometric relationships, moving towards formal mathematical arguments. Important differences exist between this Geometry course and the historical approach taken in Geometry classes. For example, transformations are emphasized early in this course. Close attention should be paid to the introductory content for the Geometry conceptual category found in the high school CCSS. The Mathematical Practice Standards apply throughout each course and, together with the content standards, prescribe that students experience mathematics as a coherent, useful, and logical subject that makes use of their ability to make sense of problem situations. | | |
| COURSE OBJECTIVES | | |
| Students should:   * Experiment with transformations in the plane. * Make geometric constructions. * Use coordinates to prove simple geometric theorems algebraically. * Prove geometric theorems. * Understand similarity in terms of similarity transformations. * Explore properties of similarity and prove theorems involving similarity. * Define trigonometric ratios and solve problems involving right triangles. * Experiment with transformations in the plane. * Understand and apply theorems about circles. * Explain volume formulas and use them to solve problems. * Visualize relationships between two-dimensional and three-dimensional objects. * Apply geometric concepts in modeling situations. * Translate between the geometric description and the equation for a conic section. | | |
| UNITS OF STUDY | | |
| * Modeling with Geometry & Definitions * Geometric Relationships and Properties * Coordinate Geometry * Similarity * Trigonometric Ratios * Rigid Motions * Circles and Conics * Geometric Measurement and Dimension | | |

|  |  |  |
| --- | --- | --- |
| COURSE POLICIES AND REQUIREMENTS | | |
| GRADING | | |
|  | Summative Assessments: | 85% Quizzes, Tests, Summative Projects |
|  | Formative Assessments: | 10% Homework quizzes, Classwork, Formative Projects, HW  ALL WORK MUST BE SHOWN TO RECEIVE CREDIT on homework! |
|  | Behavioral Characteristics: | 5% Homework completion, participation, behavior |
|  | The final grade for the year is weighted as follows; 20% for each marking period, and 10% each exam | |
| MATERIALS | | |
|  | Textbook: Pearson GEOMETRY Common Core online text and resources are available at   http://pearsonsuccessnet.com you will be given a username and password -3 ring binder, with pocket FOLDERS -Pencils (pens may only be used for taking notes) -Graphing calculator (for example TI84 or TI84 plus) -Protractor and ruler to be used at home for homework | |
| EXPECTATIONS OF STUDENTS | | |
|  | Students are expected to arrive to class on time each day with all of their materials. They should immediately take out the completed homework to be checked, and then be ready to take notes.  Students are expected to behave in a manner that is conducive to learning. Any behavior that prevents or limits the ability for the teacher to teach, or for any student(s) to learn, will be given a warning and then consequences. Consequences may include time after class, time after school, a call home, and/or a visit to the Dean. Absolutely NO cell phone use will be tolerated in the classroom at any time. Any phone that is visible to Mrs. Meyers found will be taken by the teacher and may be turned in to the Dean. | |
| EXTRA HELP | | |
|  | Extra help is available after school (MWTh until 2:55) for anyone who has received credit for at least 85% of the homework assignments. Make an appointment with Mrs. Meyers. You are encouraged to get your questions answered BEFORE you fall too far behind!  The Math Center in room 368 is open every period every day for extra help as well. You can go there during a study hall or lunch period with a pass from Mrs. Meyers. | |
| ☺Please feel free to come to me with any questions at any time. | | |