Geometry
2016-2017
Mrs. Klein-Wolf
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In this course, you will be exploring geometric situations and deepen your understanding of geometric relationships moving towards making and proving formal mathematical arguments. You will build upon concepts from the middle grades by expanding your ability to compute and interpret experimental and theoretical probability for compound events.

Topics Covered in this Course:

Semester 1	Semester 2
G0 – Algebra **G1** – Transformations **G2** – Lines and Angles **G3** - Similarity **G4** - Trigonometry **G5** - Triangles & Quadrilaterals: Application & Proof **G6** – Coordinate Geometry	**G0** - Algebra **G7** - Circles **G8** – Modeling and Constructions **G9** – Solids and Conics **G10** – Conditional Probability

GOALS
- **Empower** you with fundamental math skills
- **Enhance** your critical thinking and problem solving abilities
- **Expose** you to mathematical ideas and their related fields
- **Enrich** your life with a greater appreciation for the power and beauty of mathematics and a deeper understanding of its embedded role in the nature of our universe.

My goals as your teacher are to help you develop **mathematical reasoning skills** and to guide you to see the **relevance in the concepts** you are learning in Geometry.   I want you to see the **real world applications** of the math we do together.

STRATEGIES
Our time together will be spent posing questions and answering questions…Besides being problem solvers, I want you to ASK QUESTIONS! Throughout the year, we will explore Geometry concepts by looking at real life examples—determining what information we want to find out and creating a plan to solve these problems.

Class participation in NOT optional! Conversation in this classroom will center around math and when you engage in our mathematical discourse I will pry! I want to know what you think, why you think that and how you can support what you think mathematically!

EXPECTATIONS

In this class you will be expected to:

- Think critically and logically to solve problems
- Work individually and in groups or with a partner
- Take ownership of your learning
- Be responsible and organized
- Work hard and not give up

I expect you to arrive to class **on time**- when the door is closed, class has begun!

MATERIALS

You will need the following materials for math this year:

*One composition notebook, one spiral notebook and a pocket folder!

*A roll of tape, a pair of scissors and pencils.

* TI Graphing calculator. Please be prepared to bring this to class EVERY DAY! (These can be checked out from the Book Room...do this ASAP if you need one, they go fast!)

In this classroom…your math MUST be done in PENCIL…have a sharpened pencil, or two, everyday for class.

TEXTBOOK

College Preparatory Mathematics: Geometry Connections

HOMEWORK

Doing your own homework is essential for success- just like in a sport, homework is your math "practice" time. You will only develop your Geometry skills through practice. Making mistakes is OK! In fact, making mistakes provides us with an opportunity to get better- to grow as mathematicians and to gain deeper conceptual knowledge.

There will be some assignments where *collaboration* is acceptable. Please understand that collaboration means working together and helping each other out – not giving answers and copying answers. The main objective of this class is to get every student to learn and push himself/herself academically.

A student's homework grade must be at least 80% to be eligible to retake assessments.. (See below for more information explaining this policy).

This course will follow the Lincoln High School Proficiency Grading Policy as explained below:

Grading Philosophy:

This course uses a proficiency-based grading system. Grades are based solely on demonstration of mastery of the concepts outlined in the learning targets. Students must show proficiency in ALL major concepts to earn credit for the class and higher order thinking questions will be used to determine grades higher than a C. Students will demonstrate their mastery of concepts through formal assessments (either written or oral) that may take the form of a quiz, test, presentation, or project. Any assessment, other than final exams and the final draft of a project, can be retaken, though students must complete the requirements (see below) prior to a retake. To help increase retention, any previously learned skill can appear on later tests.

How Are The Skills Scored?

Each skill will be assessed a minimum of 2 times. A student's overall score on a skill is based on the median of the scores. If a skill is assessed more than 3 times, only the most recent three scores will be used in the median calculation. Assessments of skills will be scored using the following rubric.

Scoring Scale:

7	**In addition to score 6 performance, in depth inferences and applications that go *beyond what was taught*.**
6	**In addition to score 5 performance, *partial success* at inferences and applications that go beyond what was taught.**
5	***No major errors or omissions* regarding any of the information and/or processes (*simple or complex*) that were explicitly taught.**
4	**No major errors or omissions regarding the simpler details and processes and *partial knowledge of the more complex ideas and processes*.**
3	**Partial demonstration of simpler details/processes; major errors/omissions regarding more complex ideas/processes.**
2	**Limited demonstration of the simpler details/processes; either major errors/omissions or needs help on the more complex ideas/processes.**
1	**Even with help, very limited or no understanding of some of the simpler ideas and processes.**

Adapted from Robert J. Marzano "Classroom Assessment and Grading that Work"

In addition to individual skill scores, students will take a retention / final exam at the end of each semester. The retention / final exam will be scored on a percentage scale.

How Are Overall Grades Calculated?

Calculation of a student's overall semester grade in the course is based on the scores in each of the skills combined with the retention exam. The skill scores will be averaged.

	Skill Score Average		Retention Exam Score
A	Avg 5.8 with no skill score lower than a 5	and	70% on the retention exam
B	Avg 4.8 with no skill score lower than a 4	and	60% on the retention exam
C	Avg 3.8 with no skill score lower than a 3	and	50% on the retention exam
D	Avg 3.0 with no skill score lower than a 3	and	40% on the retention exam
F	Avg < 3.0 or any skill score of 2 or lower	or	Less than 40% of the marks on the retention exam

RETAKE POLICY

Any skill earning a 5 or below can be retaken to demonstrate mastery of that skill. Revisions + Reflections + Homework will be required prior to retakes. Retakes for a skill are typically available after the second assessment:

1. A student must have either an 80% homework completion or all homework assignments turned in to be eligible to retake.
2. Completed retake forms are due Tuesday prior to retaking during Flex that week. NO EXCEPTIONS.
3. The retake form must be complete. Incomplete forms will be rejected. NO EXCEPTIONS.
4. No single skill may be taken more than once in a week – this is to promote retention.
5. Retakes on skills may have deadlines. Be sure to retake as soon as possible and do not save retakes for the end of the semester!
6. If the grade does not improve with a retake, additional problems will be required before another retake can be taken.
7. Once you begin a retake and start the assessment, the assessment counts. Do not begin an assessment that you will not have time to finish, or do not feel adequately prepared for.

HONOR CODE

Honesty and respect are highly valued in this classroom. Any information garnered from unauthorized sources will result in a "0" grade for the assessment or project. I also follow Lincoln and District policies for discipline regarding cheating. Remember: Speaking with another student about an exam before that student has taken it,

is cheating. For example, if you have math 2nd period, and you tell your friend in 4th period what was on the test, that is cheating.