

Cathy Eagen

Roles:

Animas High School 2013-14

Geometry Teacher, Math Department Chair, 12th grade advisor

E-mail:

cathy.eagen@animashighschool.com

Mathematics DP:

<http://ahsmathematicsdepartment.webs.com/>

Cathy's DP:

<http://cathyeagen.weebly.com/>

School phone:

970-247-2474

Office hours:

Tuesday & Wednesday 3:30 – 4:45 pm.

Please respect our time and arrive prepared to work before 3:30 pm.

Geometry Course Description:

This course is designed for students who have successfully completed Algebra 1. The course includes the study of deductive and inductive reasoning and justifications for conclusions. Emphasis is placed on two-dimensional and three-dimensional reasoning skills, coordinate and transformational geometry and the use of geometric models to solve problems. Algebraic skills, as well as, geometric skills will be integrated throughout the course. TI-84 graphing calculators and the free dynamic software Geogebra will be used to enhance understanding of geometric concepts.

Topics will be integrated from skill level to application:

- Apply Distance, Midpoint, Slope, Pythagorean Theorem formulas
- Understand Symmetries & Transformations: translation, rotation, reflection, dilation and composition.
- Verify Angle relationships in polygons and with parallel lines cut by a transversal
- Determine corresponding congruence among shapes using algebraic and coordinate proof
- Apply Right Triangle Trigonometry and special right triangle relationships to solve problems
- Investigate Properties of Quadrilaterals
- Apply properties of Interior and Exterior angles of polygons and their relationship to the art of Tessellations
- Create Construction using Geometric tools: compass and straight edge.
- Apply Properties of circles and their chords and angles
- Determine Area and Perimeter of two-dimensional figures
- Determine Surface area, perimeter and volume of three-dimensional figures
- Relate three-dimensional figures to their cross-sections
- Reason proportionally to relate linear, square and cubic measurements of similar shapes
- Use Vectors to represent magnitude and direction and solve application problems

Grading Policy:

ALL Classwork and Homework will fall into two weighted categories which make up a student's course grade:

- **80%** of a student's grade will be determined by **Graded Work** which includes some specified homework, quizzes, tests, Geogebra Lab questions and conclusions, projects, unit content reviews and semester exam reviews, and semester exams. Each of these may vary in point value between 10 points and 100 points
- **20%** of a student's grade will be determined by **Completion Work** which includes daily starters, homework, composition book entries, Geogebra Lab constructions. Each of these may vary between 5 points and 15 points.

- **Cumulative 1st Semester and 2nd Semester Exams** will determine how well students have learned and can apply concepts from the entire semester. These will be included as a **100-point test grade** in the graded work category. 1st & 2nd semester exams will occur in **early-December** and **mid-April**, respectively.
- **Corrections:** For most quizzes and tests that are 35 points or more, (except for cumulative exams on which there are NO corrections), students will have the opportunity to make corrections and earn back **one-half of their missed points**. All students are expected to do corrections **following outlined guidelines**. All students are expected to earn back the **maximum** number of points by attending office hours for help if needed. Corrections are due **within one week** of tests being returned to students. Corrections are equivalent to **EXTRA CREDIT**. If you score 70 out of 100 on a test, you could earn 15 points with “correct” corrections, bringing your grade to 85%. If you score 50 out of 100 on a test, you could earn 25 points with “correct” corrections, bringing your grade to 75%. **ALWAYS do corrections and do them correctly!** There is no excuse for earning less than the maximum number of correction points.

Late Work:

If you are absent from school, it is **your responsibility** as a student to do the following:

1. Check my DP for information about missed work. Handouts will be posted on my DP.
2. Contact me for clarification of concepts, clarification of work missed and clarification of your due date.
3. Attend office hours for extra help!!!
4. Complete work and submit it by the pre-determined due date.

I highly suggest that you find a partner in class to exchange e-mail and phone numbers with, who can be your contact if you are absent. For excused absences, you will be given the same amount of time to complete the assignment as the rest of the class. **While completed late work is welcomed, the maximum grade possible is 50%. Late work will not be accepted more than two school days after you return to class.** In addition, late work will be graded at my leisure. Homework is due at the beginning of class each day. When printing is expected, print before coming to class—if you print after the start of the class, the homework will be considered late. For large projects submitted late, students will earn a grade **less 10% for each calendar day** the project is late.

HABITS OF HEART AND MIND:

- **Perseverance:** Don't give up. Learn to work through difficulty. Be a patient & persistent problem-solver.
- **Advocacy:** When you or another needs help or does not understand, ask questions.
- **Perspective:** Have a point of view; respect and understand the points of views of others. Be mindful of tolerance.
- **Refinement:** Take pride in everything you do in class and make it beautiful, whether you are reading, writing, speaking, or creating. Present your best work at all times.
- **Evidence:** Use it to back up your perspective. Require it of others who make claims. Base decisions upon it.

UNIVERSAL SCHOOL RULES:

The following are in place to ensure a respectful and safe learning environment. Violation of these rules will result in your helping in various school and classroom improvement activities.

1. **Swearing** is unprofessional and rude. Cultivate a vocabulary that eliminates curse words.
2. **Listening to music** anywhere in the building without instructor permission is prohibited. **Wearing headphones around your neck** is prohibited. This is considered the same as listening to music.
3. **Follow the AHS fashion guide.**
4. **Chewing gum** is prohibited.
5. **Use technology appropriately.** NO Facebook, Skype, video games without instructor permission.
6. **Hats/hoodies** are not to be worn in school.

CATHY'S CLASSROOM RULES:

Classroom Protocols for an efficient and effective learning environment:

This is high school and you are on the road to greater independence and greater responsibility. With that in mind every student must come to class with the necessary supplies. (The supply list for class is on the next page.) Bring to class at least two pencils and two pens, colored pencils, your binder with loose leaf graph paper, a pocket folder, a graph paper composition book, I will try to let students know in advance when laptops are necessary. When all else fails BE PREPARED.

When you arrive to class, find your place, get out your materials and be prepared to begin learning and working when class starts. Anticipate what you will need by reading the agenda on the board. Bring a planner to record assignments and due dates.

Our collective purpose and objective for every class is to learn, to gain knowledge of mathematical ideas, to apply our understanding and solve problems, to think, reason and communicate mathematically. When I say "our collective purpose," I am expecting every student to come to every class prepared to learn every day. Be respectful of self, others and our environment.

Before you may exit class, remember, "Leave no trace." Clean your work space, put trash in the garbage can, return classroom supplies to their rightful place, push in your chair and have your planner out for Cathy to check.

Bring your Mindfulness for the Learning Environment: Please come to school well-rested and nourished to give your mind the energy it needs to tackle the work of the day. Embrace and enjoy learning: What you never learn, you will NEVER use in life. What you do learn will open doors for many new opportunities in life. Be inquisitive and curious and ask questions.

Technology in the classroom: Students should bring to class their graphing calculator and their laptop. Students will use these on a regular basis. Phones and ipods should never be a distraction in our class. Out of respect for our learning environment, phones and ipods should be OFF and stored in your backpack during class. Choose to interact with your peers in order to develop mathematical connections and dialogue.

Cleanliness of Environment: A neat and clean classroom workspace allows for positive learning environment. Our classrooms are clean and new and together we will work to keep them in spit-spot condition. Be mindful of mud and dirt on your shoes and wipe your feet at the entrance to the building. Be mindful of writing only on your paper and notebooks, never on tables. Be mindful of putting trash and recycling in its proper place.

Cleanliness of Self: Personal hygiene is a necessity. Groom yourself so that you can present your best self to our community. Shower and use deodorant but please do not overpower anyone with your cologne or perfume. That is an affront to our olfactory sense.

Food and Drink in the Classroom: Students may have a water bottle with closable cap in the classroom. Never bring an open container of soda or extreme caffeine drinks to class. Food is a distraction in the classroom and I prefer that students eat breakfast before school and lunch during the designated lunch period, however, growing teenagers sometimes need a snack. With teacher permission, students may consume a snack like pretzels, almonds, carrots or grapes. Snacks should never cause disruption or distraction to the learning environment.

STUDENT SUPPLIES: Be prepared for class everyday with these supplies.

1. REQUIRED a **student planner/calendar** for due dates, organization and time management
2. HIGHLY RECOMMENDED **TI-84 graphing calculator**: TI-84 or TI-84 Plus or TI-84 Plus Silver edition (check e-bay for used and low price TIs) This calculator is more than an 8 year investment when you consider college. Learn how to use this powerful machine now for more than 4 functions. ("TI" stands for Texas Instruments).
Note: AHS math department has some graphing calculators for classroom use at school but NOT to take home.
When you purchase a TI-84 calculator bring in to your teacher the **Rewards Symbol** on the package insert. Animas High School can purchase equipment with these points.
3. REQUIRED a **laptop** on which you can install Geogebra, on which there is a word processing program, with which you MUST be able to access the internet, on which you can save files.
4. REQUIRED a **thumb drive** for backing up files for all of your classes.
5. REQUIRED **GRAPH PAPER COMPOSITION BOOK** by Monday August 26
6. REQUIRED **GRAPH PAPER loose leaf**, (no lined paper)
7. REQUIRED a **1.5 inch 3-ring binder with 5 tab dividers**
8. REQUIRED **pencil case** to keep the following supplies:

- a. REQUIRED **at least 2 pencils, an eraser and 2 pens** (some students prefer several colored pens and mechanical pencils that do not require sharpening.)
- b. REQUIRED **at least 5 colored pencils**: any colors of your choice other than black
- c. REQUIRED **1.5 oz bottle of Elmer's glue** or **glue stick**
- d. REQUIRED **scissors** comfortable for your hand, adult size if needed
- e. REQUIRED **ruler 30 cm ~ 12 inch**, translucent
- f. REQUIRED **protractor** translucent



Please complete the STUDENT and PARENT CONTACT INFORMATION on the next page and return this to Cathy by the end of the 2nd week of school.

PLEASE COMPLETE AND RETURN THIS PAGE TO CATHY BY AUGUST 30, 2013

Student Printed Name: _____ period _____ Geometry 2013-2014

I have read and understand the information in Cathy's Geometry course syllabus.

Student signature: _____

Parent signature: _____

Parent contact information:

Mom's e-mail: _____

Mom's phone: _____

Dad's e-mail: _____

Dad's phone: _____

Below, please let me know any information about your student that would help me help your student be successful this year in Geometry.