Oakland School for the Arts Course Syllabus – Core Connections Geometry Instructor – Doug Bonacum Contact – dbonacum@oakarts.org Blog – teachers.oakarts.org/~dbonacum Attendance personnel – attendance@oakarts.org

Course Overview: While all branches of mathematics are tools for understanding real world relationships and solving problems, geometry is special! Thomas Jefferson modeled the composition of the Declaration of Independence on a geometric proof and Rene Descartes used geometric reasoning in a systematic search for all possible truths to conclude "I think, therefore I am." Leonardi Da Vinci applied "sacred geometry" in painting the Mona Lisa. Geometry is the mathematics of shape and size. It's about the properties of objects and the consequence of how those objects are positioned in space. At its roots, geometry is fun, colorful, and real. As you apply arithmetic, algebra, and reasoning skills to investigate natural and man-made objects all around us, you will develop the life-long skills of questioning, analyzing, gathering and constructing evidence, problem-solving, and communicating rigorous arguments to justify your thinking. In the spirit of "all teach, all learn," you will collaborate with others, sharing information, expertise, and ideas in a structure that consists of small groups of students working interdependently on common tasks.

Students who are successful in this course: (1) believe that their math abilities can be developed with perseverance and hard work; (2) are physically and mentally present; and (3) learn math by doing math. Through active participation and adherence to the values / principles below, all students will have access to a safe learning environment, progress, and feel successful.

<u>Course Guidelines</u>: During the first week of school, I will provide a few basic rules related to things like personal electronic devices and accessing help, and several procedures for things like homework and entering & exiting class, but for the most part, our behavior will be guided by a short set of higher level principles/values that we will jointly develop to meet our needs as learning community. These shared guidelines will help shape how we think, listen, speak, and act in geometry class.

<u>Course Resources</u>: The course text is College Prep Math (CPM)¹, Core Connections Geometry (<u>www.cpm.org</u>). Hard copies of textbooks will only be available for in-class use and for students who do not have internet access at home. Supplies you will need to provide include:

- At least 2 sharpened pencils; or 1 mechanical pencil with extra lead. If you don't use a mechanical pencil, please also have a personal (individual) pencil sharpener should you need one once class starts.
- 1 red pen (for homework corrections)
- Graph ruled composition notebook (typically 80 100 pages with 4-5 squares per inch). This will be used for completing homework and most classwork.
- Three-ring binder 2 inch. This will be used for storing Resource Pages, Toolkits, Assessments, Graphic Organizers, and the like. Please include about 50 pages of lined paper
- o Ruler
- Protractor & Compass (although compass not needed until Chapter 9, so okay to wait)

Several Chapters in the text assume that the student has access to a TI-83+ or TI-84+ graphing calculator.

¹ The three pillars of CPM are (1) Cooperative / Collaborative engagement; (2) Problem-based learning; and Mixed, space practice. These will be described further in class.

They will be used in most math classes through-out a student's high school career. New, these cost between \$80 and \$100 on line. For this year, we can get by with a TI-30X IIS 2-Line Scientific Calculator which is available on-line for about \$10. You may also want to have 3-4 different colored pencils available for your personal note-taking purposes, but these are optional.

Attendance and Participation: Attendance and participation are vital components to the understanding and learning of course content. Be on time and fully present for each class. Any student, who arrives to class after the bell has rung will be marked "tardy." Plan to read, prepare, and participate during class. In the event you have an excused tardy or absence, OSA requests that your parent/guardian electronically notify both your teacher and attendance personnel. In the subject line of the email, please use the following format: "student name – absence excused [__/ __/ __]" OR "student name – tardy excused [__/ __/ __] Period [__]". (can't find that on line). While you are out, homework assignments and important announcements are available to you on my blog.

For excused absences, the general rule is that students will have the number of days that they were absent to makeup missed work for full credit. For unexcused absences, make-up work/assessments may still be accepted for partial credit depending on the circumstances.

Academic Honor Code

Academic honesty must be demonstrated at all times to maintain the integrity of scholarship and our reputation. Academic dishonesty undermines the bonds of trust and honesty between members of the community and betrays those who may eventually depend upon your integrity and knowledge. While students are expected to work interdependently (e.g., share information & insight; critique each other productively; build on each other's ideas), copying another's homework or cheating on an assessment is dishonest (as is allowing someone to copy or cheat!), impedes your progress, and ultimately hurts our entire learning community.

Course Grades: Grades for the first semester will be calculated using the categories below. Homework will generally be assigned throughout the week and checked for effort each day. Approximately once per week or two, a small subset of previously assigned homework problems will be used as a quiz. Prior to each Chapter exam, a notebook / binder quiz will be done that will assess how well your work is organized and that you have been keeping up with notes and classroom activities. At the conclusion of each chapter, an exam will be given that will include both an individual and a team assessment. The purpose of including "College and Career Readiness" in the grading process is to communicate the importance of developing work habits that facilitate life-long success – these are related to organization & material readiness, classroom participation & collaboration, and respecting others.

Homework

a. Homework quizzes	20%
b. Homework effort	5%
Notebook / Binder quiz	5%
Chapter exams	
a. Individual assessment	50%
b. Team assessment	10%
College & Career Readiness	10%

While I do not give Extra Credit, reassessment opportunities will be available to students who request it for the purposes of relearning and recovering from a failing grade (less than 70%) on homework quizzes and chapter exams.

My pledge to you: While I will not always get it 100% right, I pledge to: (1) Plan and implement learning activities that will help each student achieve grade-level learning goals and enable their success in geometry; (2) Assess each student's progress on an on-going basis and communicate to them and their parents regarding progress; (3) Redirect students from doing things that will interfere with their success in class or someone else's success; (4) Listen to any concerns about classroom rooms, procedures, or consequences outside of instruction time; and (5) Learn from my mistakes.

Additional support: I will be available for extra support during office hours.

I have reviewed this syllabus with my student and both my student and I understand all course policies.

Does your student have internet access at home?	Yes	No	
Printed Parent / Guardian Name			
Parent / Guardian Signature	 Date		
Student Print Name			
Student Sign Name	 Date		

Please include anything on the next page that would be helpful for me to know about your student and you – things like: What is the best way to contact you? How does your child learn best? What are their interests outside of school? Etc.