

Geometry Honors

Northwest Career and Technical Academy
Course Expectations
2011-2012

Instructor: Ricci Slobodnik
rslobodnik@interact.ccsd.net
www.joecoolmath.com

Course Description

This one-year course provides a rigorous study of Euclidean Geometry for the more advanced mathematics student. Emphasis is on the development of logical reasoning, through techniques of proofs and constructions, geometric concepts, and algebraic applications. Students will extend their ability to make mathematical connections through problem solving. The use of mathematical tools and technology, including calculators and computer software, is an integral part of this course. This course will fulfill one of the mathematics credits required for high school graduation.

Course Goals

Upon completion of this course, the students will be able:

1. To understand and use the mathematical vocabulary and notation specific to geometry. [NS: B]
2. To develop the ability to reason and communicate mathematically in order to apply learned concepts to new problem-solving situations. [NS: A, B, C, 2.12.2, 3.12.5, 4.12.5, 4.12.6, 4.12.7]
3. To analyze and solve problems using inductive and deductive methods of reasoning. [NS: A, C, 4.12.5, 4.12.6, 4.12.7, 4.12.8, 4.12.9]
4. To explore connections among geometric and algebraic concepts, and the physical world. [NS: D, 1.12.7, 2.12.3, 2.12.4, 2.12.5, 2.12.6, 3.12.5, 4.12.1, 4.12.2]
5. To construct and analyze informal and formal proofs of mathematical conjectures. [NS: A, C, 4.12.5, 4.12.6, 4.12.7, 4.12.9]
6. To discover and validate geometric conjectures and properties by construction, coordinate geometry, and transformational geometry. [NS: C, 3.12.3, 4.12.8]
7. To formulate and solve problems using geometric concepts and algebraic techniques. [NS: A, 1.12.7, 1.12.8, 2.12.2, 2.12.3, 2.12.4, 2.12.5, 2.12.6, 4.12.1, 4.12.2]
8. To understand and apply the relationships among similar and/or congruent polygons. [NS: 4.8.2, 4.8.3, 4.12.2]
9. To solve problems using the properties of right triangles and their applications. [NS: A, D, 4.8.7, 4.12.2, 4.12.7]

Textbook

Holt Geometry, will be the primary text for this course. If lost the student will be responsible for a \$60.00 replacement fee.

This textbook will also be available online for students to reference at home. You can access the online textbook at my.hrw.com. You will be given a username and password in class.

Materials

For this course the following supplies are required to be brought to class each day...

- Pencils
- A three-ring binder **for this course only**. A 1-inch binder is recommended.
- Loose leaf lined paper inserted into the binder.
- Ruler and protractor
- Scientific Calculator

Recommended, but not required...

- Texas Instruments Graphing Calculator, either TI-84 Plus or TI-Nspire with CAS
- Colored Pencils
- A 3-inch three-ring binder for transferring class notes to long term storage.

Technology Applications

The use of graphing calculators is required in this course. Students will also need to be able to use computer applications such Microsoft Word, Microsoft PowerPoint, Microsoft Excel and internet search engine tools.

*“One important
key to success is
self-confidence.
An important
key to
self-confidence is
preparation.”
~ Arthur Ashe ~*

Course Outline/ Benchmarks

The topics to be studied will be approached in the following manner:

1 st Semester			2 nd Semester		
Topic	CCSD Objective	Textbook Sections	Topic	CCSD Objective	Textbook Sections
Algebraic Emphasis	12.1 (all year)	1.1–1.4, 1.6	Algebraic Emphasis	12.1 (all year)	6.2, 6.3
Points, Lines, Planes, and Angles	1.1–1.9	2.1–2.5 3.3–3.8	Similarity	6.1–6.8	7.2–7.6 8.1–8.4, 8.6
Logic, Reasoning, and Proof	2.1–2.12	4.2–4.4, 4.7, 4.8	Right Triangles and Trigonometry	7.1–7.8	9.2–9.6
Parallel and Perpendicular Lines	3.1–3.8	5.1, 5.3-5.8	Perimeter & Area	8.1–8.4	10.1, 10.2, 10.6
Triangle Relationships	4.1–4.15		Area and Volume	9.1–9.4	11.4
Polygons	5.1–5.9		Circles	10.1–10.8	12.3, 12.4
			Transformational Geometry	11.1-11.5	

Classroom Rules

- **Respect yourself and others.**
Allow yourself and others the opportunity to learn. Treat others as would have them treat you. Keep your and the school's property in good condition.
- **Be prepared to learn physically and mentally.**
You are expected to bring a three-ring binder with paper, your student planner, textbook, and a sharpened pencil to class each day. Listening and active participation are mandatory. These requirements are part of your participation grade, as well as a key to success in this class.

School Rules

All school rules listed in the NWCTA Handbook will be strictly enforced within the classroom, including but not limited to:

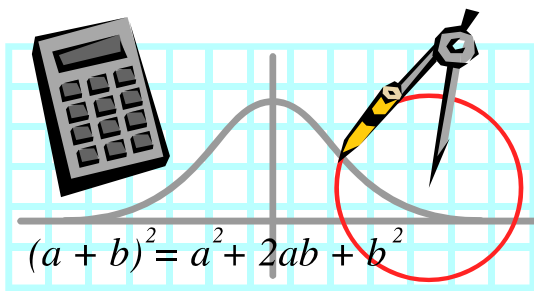
- Proper Use of Computers
- Proper use of Internet
- Tardies

Academic Integrity- All students *involved* in copying, plagiarizing, or cheating of any kind will receive a zero on the assignment. In addition, students may face additional consequences based on the severity of the incident. Please see attached academic honor code for further clarification.

Classroom Procedures

Other classroom procedures are as follows, but are not limited to this list.

- No food, drinks, or gum in class. Water bottles are OK.
- Refrain from talking while instructor is giving directions to the class.
- Do not write, read, or pass notes.
- Raise your hand to ask questions or to participate in a class discussion.
- No lining up at the door before the end of class.
- All homework assignments will be due the class day after they are given, unless otherwise stated.
- You will grade your own homework in class. You must use a green pen, supplied by Mrs. Slobodnik to grade your papers. Any other pens or pencils on your desk will result in a zero for the assignment.
- If you are tardy for class please sign in on the Tardy Sheet, located by the door.
- You will be assigned a calculator to use in class, if you do not own your own. You are responsible for using the calculator assigned to you and returning at the end of each class period.
- Cell phones, pagers, CD players, MP3 devices as well as other electronic devices are not allowed to be used in the classroom. When seen, the device will be taken to the dean's office and will need to be retrieved by a parent or guardian.



Grading Criteria and Method of Computation

Scale

A = 100 – 90% B = 89.9 – 80% C = 79.9 – 70%
D = 69.9 – 60% F = Below 60%

Procedures for grade computations

Quarter grades:

- 70% from assessments
- 30% from in class assignments and homework

Semester Grades:

- 45% from each quarter grade
- 10% semester final

Notes

Note taking is a necessary and required part of being successful in this course. The Cornell note-taking method will be used in this class and notebooks will be checked periodically for a quiz grade.

Assignments

Daily assignments will be worth 10 points each and students are expected to work on them both in class, when time permits and at home. Students will also be given assignment points for TI-Navigator participation.

All work must be shown for credit!!!

Students will grade their own work in class and will calculate a percentage of their correct work for points.

10 points – 100-80%	3 points – 39-30%
5 points – 79-60%	2 points – 29-20%
4 points – 59-40%	1 point – 19-1%

Assignments not receiving all 10 points may be resubmitted the next class day with corrections for full credit.

Extra Credit, if offered, will be academic in nature.

Assessments

Assessments will demonstrate students' understanding and mastery of the lessons we do in class and are the majority of a student's grade. There will be several different types of assessment in this course.

- Tests – 2 to 3 per quarter worth 100 points each
- Quizzes – As needed and varying in points by the number of questions, but never worth more than a test.
- Vocabulary Quizzes – Same as quizzes, but can be taken multiple times until highest grade is obtained.
- Quarter Projects – Worth 100 points each

Late Work

No late work will be accepted. Partial credit may be given for incomplete work that is turned in on the due date (see assignments). When doing group work, be sure all members of the group have copies of all parts of the project. IEP and 504 accommodations will be followed.

Make-up work

Make-up work for an *excused* absence will be accepted for credit if turned in three class days following the absence. **Work for an unapproved absence or late work may still be turned in; however it will receive no credit.** If the student is absent for more than one day, an additional class day will be given for make-up work for each day beyond the first. Assignments given the day prior to an absence are due the day the student returns to class.

Tests and quizzes may be made up after an approved absence *within* three class days following the missed day. It is the student's responsibility to come in after school or make other arrangements to make-up a test or quiz.

Citizenship

Three citizenship points are allocated to a student for each day and may be lost in the following ways...

- 1 point: Habitual lack of class equipment; book, notebook, paper, pencil.
- 1 point: Not prepared when asked to participate, either on the Navigator system, in a group, or whole class.
- 1 point: Receiving more than one warning about talking during instruction or other interruptions.
- 2 points: Missing an assignment.
- 2 points: Arriving to class tardy.
- 3 points: Unexcused absence.

Citizenship will be determined by the percentage of points earned and the number of behavior violations in a grading period. Citizenship involves active participation in class with respect of your right and others right to learn. The lower citizenship mark will be given if there is a difference between participation and behavior violations.

Outstanding = 100 - 95% and 0 behavior violations

Satisfactory = 94 - 80% and/or 1-2 violations

Needs Improvement = 79 - 70% and/or 2-3 violations

Unsatisfactory = 69% or below and/or 4 violations or a dean's referral

Three (3) or more tardies or four (4) or more unexcused absences will result in a "N" in Citizenship.

After five (5) tardies or seven (7) unexcused absences, the student will receive an "U" in Citizenship.

Three (3) or more missing assignments will also drop a student to the next lower citizenship grade.

Behavioral Expectations

Classroom behavioral expectations will be discussed with you. Violation of classroom, Northwest Career & Technical Academy's or the school district's rules will result in the following...

- 1st violation: verbal warning, possible S in citizenship
- 2nd violation: behavior assignment and/or parent contact, S or possible N in citizenship
- 3rd violation: 30 min. detention and/or parent contact, N in citizenship
- 4th violation : referral to dean, U in citizenship

Possession of weapons, theft, fighting, possession or use of narcotics, gross insubordination (threatening or cursing the teacher or another student) will result in immediate referral to the Dean on the 1st offense and possible RPC, suspension, arrest, and/or expulsion.

Rewards

I believe that recognition for appropriate behavior is as important as inappropriate behavior. Rewards may consist of one or a combination of:

- Verbal or written praise
- Positive parent contact
- Increased alternative activities in the class
- Other forms of recognition

**“The only place success comes before work is in the dictionary.”
~ May Smith ~**

NORTHWEST CAREER AND TECHNICAL ACADEMY ACADEMIC HONOR CODE

Students are expected to demonstrate honesty and integrity while in attendance at the Northwest Career and Technical Academy. Each student is expected to do his or her own work, including homework, test-taking, class and computer lab assignments, and the creation of essays, compositions, term papers, computer presentations and scientific research. There is no distinction between giving or receiving unauthorized help; one who helps another to cheat is as guilty as one who benefits from cheating. The following actions are considered cheating:

1. Claiming credit for work that is not the product of one's own honest effort.
2. Providing unwarranted access to materials or information so that credit may be dishonestly claimed by oneself or others.
3. Submitting work to more than one teacher for course credit without prior approval.
4. Forging or falsifying of any school records or forms.
5. Knowledge of and toleration of any of the foregoing.
6. Any behavior which can be defined as cheating represents a violation of mutual trust and respect essential to education at the Northwest Career and technical Academy.

Students who cheat should expect to be confronted by their teacher, staff member, or administrator observing this behavior and be subject to one or more of the following consequences:

1. Zero/no credit on the assignment.
2. Notification of parents/guardian.
3. Documentation on Discipline Record.
4. Required Parent Conference
5. Signing of a behavior contract to be placed in the student discipline record.
6. Honor Code Probation.
7. Exclusion from school activities such as dances, activities, athletics, field trips, and graduation
8. Loss of college recommendation letters.

All students who have computer access should be aware of the Acceptable Use Policy for computer usage and follow it.

A Note from Mrs. Slobodnik

I hope you find my class this year as easy as "pi"! I believe that every student has the potential to learn and succeed. I will always be here for you, so please never hesitate to ask me for assistance. Below are some comments from my previous students. **I hope you all have a great year!**

Advice on How to Succeed in My Class

- Don't fool around and concentrate.
- Do your homework.
- To be successful in this class you just have to try. Attempt all homework assignments and take all notes. Pay attention and be nice to Mrs. Slobodnik. She works hard to help us pass so be nice to her.
- Don't talk when the teacher is talking.
- Do your work, come to class on time, listen to the teacher, try your best, have fun.
- She's very clear on what we're learning, if you're not paying attention then you won't understand.

Comments about Mrs. Slobodnik

- Mrs. Slobodnik, you were a good teacher and you helped me understand. I learned a lot of new things.
- The teacher was helpful and very friendly; she made me enjoy the class.
- What I liked most about the class was the teacher. Because to tell you the truth, I've never liked math. The reason that I have been passing is because she gave me the opportunity to help myself.
- The teacher took the time to actually teach us the subject until we understood. Although there were over 30 students and only one teacher she managed to give each person a bit of extra help.
- She made the subject very clear. I wasn't confused, but if I was, she came (by) one on one and made it clear.
- I liked the atmosphere of this class. No one felt dumb or slow.
- You are in good hands with Mrs. Slobodnik.

The signature form below is an assignment. You have two choices on how to turn it in, either way it is due by the next class day.

Assignment choices...

1. You and your parents fill out the form below and return in class.
2. You and your parents fill out this form electronically at www.joecoolmath.com.

Either way you choose, I encourage you and your parents to visit my website, if possible, and explore the resources available there. I will be posting note outlines, assignment and assessment resources, a link to our on-line textbook, practice quizzes, an assignment calendar and much more throughout the year.

Cut here – Return this portion to Mrs. Slobodnik, Room 504 OR submit electronically at www.joecoolmath.com

Northwest Career and Technical Academy
Course Expectations Agreement – Geometry Honors
2011-2012

Please Print in Ink

Student Name: _____ Nickname: _____

Parent(s)/Guardian(s) Name(s): _____ Relationship: _____

Phone: _____ Email: _____

I/we would be preferred to be contacted by Phone Email

Secondary Contact(s): Name(s): _____ Relationship: _____

Optional Phone: _____ Email: _____

I/we would be preferred to be contacted by Phone Email

I have read the expectations of this course and commit to following the class rules.

Student Signature: _____ Date: _____

I have read and understand the requirements of this course and will do my best to assist my student.

Parent Signature: _____ Date: _____