

Port Townsend High School

Course Title: Algebra 1

Credit awarded: 0.5 credits per semester for a total of 1 credit for the year

Teacher Name: Amos Freeman

Teacher Email: afreeman@ptschools.org

Phone: Please note that email is a way better way to reach me and you will hear back from me much faster. This is the phone number of the main office if you need to leave me a message: 360 379 4520

Overview of the course:

This course is designed to provide a foundation for students as they continue in their mathematical education. We will be emphasizing manipulation and use of functions to represent mathematical relationships. We will also continue to build problem solving skills and provide students with “tool kits” of mathematical strategies they can use as they move into Geometry and Algebra 2.

My goal as the instructor for this class is to act as a facilitator and guide, rather than a repository of information. Often, students will be required to think deeply about the material we are working with and collaborate with their peers to use problem solving strategies to work through challenging or unfamiliar problems.

Learning Expectations:

- **Participate and engage in class discourse and activities** – You will get the most out of class by being involved. This doesn't mean you *always* have to answer questions or volunteer. However, it is unlikely you will learn as much by simply observing class.
- **Be mentally and physically prepared for class** – Have your workbook on hand during class and keep other distractions to a minimum. Be sure to bring your workbook to class each day. If you wish to use your own computer in class rather than a school-provided chromebook, please bring that as well.
- **Be respectful and behave appropriately during class** – Be kind and show respect to your fellow students in both your actions and your words. Remember that our classroom is a place of learning, and impeding your fellow students' ability to learn will not be tolerated.
- **Use your time wisely** – When working independently, set a time that you will work and focus on your work during that time. Remember that we learn through practice and learning a little bit at a time. Our learning builds upon prior learning, so we need time to process and understand before we can learn something at a deeper level.
- **Take ownership of your learning** – Work to the best of your ability, turn in things on time and be proactive in your academic growth. You will have to be a self-advocate for your education to ensure success. If you do not actively choose to promote your own learning, it is unlikely that you will make much progress.

Textbook: We will be using **Carnegie Learning** as our curriculum and textbook along with supplemental assignments from our previous textbook and other sources. Students will have a workbook that we will be working out of. You will be provided the required workbooks in class.

We will also be working within a digital workspace called MATHia. MATHia will be a good source for practice. We will primarily be working on MATHia in class, however some might need to be completed at home. Other assignments will be provided for supplementary practice as needed.

Course Outline

The units for this course, laid out in the Carnegie Learning textbook, are:

1. Searching For Patterns: Overview of types of functions and sequences.
2. Exploring Constant Change: Exploring linear functions along with systems of linear equations and inequalities.
3. Investigating Growth and Decay: Breakdown of Exponential functions and how to work with them.
4. Describing Distribution: Single and double variable statistics
5. Maximizing and Minimizing: Quadratic functions and their applications

These modules are connected to the Common Core standards for math that have been adopted by Washington State. We will work towards the goal of completing all 5 modules, but may choose to skip some sections to focus on high priority topics. If you have any specific questions about the modules and their topics in more detail, feel free to contact me.

Common Core Math Standards:

A complete list of standards can be found at: <http://www.corestandards.org/Math/Content/> and selecting “High School: Algebra” from the column on the right. Along with the content standards, we will be emphasizing the mathematical practices which are not algebra specific, but will help students in any math they take. These practices are:

1. Make sense of problems and persevere in solving them.
2. Reason abstractly and quantitatively.
3. Construct viable arguments and critique the reasoning of others.
4. Model with mathematics.
5. Use appropriate tools strategically.
6. Attend to precision.
7. Look for and make use of structure.
8. Look for and express regularity in repeated reasoning.

More information for these mathematical practices can be found at:

<http://www.corestandards.org/Math/Practice/>

Grading:

Tests and Quizzes	<p>There will be 1 or more unit tests during each chapter. Unless you contact me in advance and have legitimate barriers, you must sit for a test unless you have an excused absence on the day of the test. Being absent on the day(s) prior to a test does not excuse you from taking a test. If you are not prepared, you will still be required to take the test. When you return to class, you will be required to make up a missed test as soon as possible, unless you discussed your absence with Mr. Freeman and he agrees to an extension.</p> <p>Students will be allowed 1 sheet of notebook paper (front and back) of notes that they created on the test. However, there may be a separate portion of the test that does not allow notes. Students will be notified of this in advance.</p>
Assignments and Homework	<p>There will be take home assignments periodically. Assignments will be checked for effort and percentage completed. To get credit, you must have the solution completed, ON YOUR PAPER prior to the start of the class period. Students must write down, and justify all procedures, including those done on calculators.</p> <p>All work is due on the due date.</p>
Final Exam	<p>At the end of each of the two semesters there will be an exam that covers all content <u>from the beginning of the year</u>.</p> <p>Students will be allowed 2 sheets of notebook paper (front and back) of notes that they created on the test. However, there may be a separate portion of the test that does not allow notes. Students will be notified of this in advance.</p>

Assigning Letter Grades: Letter grades are based on the percentages, of the total points earned, that are used for all students at PTHS.

Letter	High	Low
A	100.00	93.00
A-	92.99	90.00
B+	89.99	87.00
B	86.99	83.00
B-	82.99	80.00
C+	79.99	77.00
C	76.99	73.00
C-	72.99	70.00
D+	69.99	67.00
D	66.99	60.00
F	59.99	0.00

Class Materials/Required Supplies:

Students should arrive prepared to learn with pencil, paper or notebook and any homework that is due. Textbooks, rulers, protractors, calculators and graph paper are provided in the classroom.

Cell Phones:

This class adheres to the PTHS Cell Phone/Personal Communication Device Rules. A cell phone holding device will be available in my classroom. Upon entering my classroom, students are required to silence their ringers and place their

phones in the holding device, or secure them in their backpacks, daily. Students who are caught with their cell phones on their person (i.e. in a pocket) or using them during class time (including in the hallway or other spaces) will have them removed per the school's cell phone policy. They will be turned in to the office, and appropriate consequences will be applied.

Academic Integrity:

You are expected to do your own work at all times. Each of you understands the difference between working on homework in a group, and cheating by copying. Similarly, you are expected to show what you know and can do on all tests. Anyone caught cheating will receive a zero for that assignment or test and will be reported to administration and your parent or guardian will be contacted. You will be much better off with a low grade on a test than a zero on a test. I encourage you to do your best and if you are not happy with the result, work harder for the next assessment.

Important Websites:

Skyward	https://www2.wrdc.wa-k12.net/scripts/cgiip.exe/WService=wporttos71/seplog01.w	Login using Skyward login and password to check grades.
---------	---	---

Other Digital Resources:

There are a wide variety of resources available online designed to help students build their math skills.

- School Yourself: schoolyourself.org/learn
- Khan Academy: www.khanacademy.org/math/algebra
- IXL: www.ixl.com/math/algebra-1
- Math.com: www.math.com/homeworkhelp/Algebra.html

There are also a variety of online math tools that we will be using periodically in class:

- Desmos, a digital graphing tool: www.desmos.com
- Wolfram Alpha, a website that helps students solve and visualize problems: <http://www.wolframalpha.com/>

Communication

Students – The emphasis in this class, and in your grades, is *to improve upon where you started from and continually grow*. You are only limited by the effort you are willing to put forth to earn the grade you want. *You will succeed in algebra 1 if you try*. Succeeding in this class isn't just about mathematical reasoning and knowledge. It's also about your ability to try, **ask for help** when you need it, and develop the skills necessary to analyze something critically. Please email me if you are stuck on something while you are doing your homework. I will either send you a message back, or address the question in class the next day (others will most likely have a question similar to yours).

Parents or Guardians – I know that keeping up with your student's progress is extremely important to you. The best tool to keep you informed is the Skyward online program that can be accessed through the school's website <http://www.ptschools.org>. If you do not have a login and password yet, please contact the main office. I work very hard to keep grades current and anticipate that you will be checking online on a regular basis. I am always very happy to speak with you. *If you have any questions or concerns, please feel free send me an email anytime: afreeman@ptschools.org*