**New Town High School**



**Algebra 2**

**2014 – 2015**

**Course Overview:** The primary focus of Algebra 2, a course required for all diploma-bound students, is the exploration of quadratic, exponential, and logarithmic functions and their applications in the real world. *Prerequisites: Successful completion of Algebra I, and possibly Geometry.* Topics to be covered will include:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Quarter** | **Unit** | **Topics** | **Chapter Total** | **Total for year** | **Anticipated Assessment Date** |
| 1 | 1 | Solving Equations and Inequalities | 3 | 3 | September 5, 2014 |
| 2 | Linear Relations and Functions | 5 | 8 | September 30, 2014 |
| 3 | Systems of Equations and Inequalities | 4 | 12 | October 16, 2014 |
|  |  |  |  |  |  |
| 2-3 | 4 | Matrices | 5 | 17 | November 7, 2014 |
| 5A | Polynomials | 9 | 26 | December 11, 2014 |
| 5B | Radical Expressions and Equations | 7 | 33 | January 16, 2015 |
| 6 | Quadratic Functions and Inequalities | 11 | 44 | February 20, 2015 |
| 7 | Polynomial Functions | 5 | 49 | March 6, 2015 |
| 10 | Exponential and Logarithmic Relations | 9 | 58 | April 1, 2015 |
|  |  |  |  |  |  |
| 4 | 9 | Rational Expressions and Equations | 8 | 66 | May 4, 2015 |
| 8 | Conic Sections | 4 | 70 | May 20, 2015 |
| 11 | Sequence and Series | 6 | 76 | June 8, 2015 |
|  |  |  |  |  |  |
| EXTRA DAYS | | HSA Review | 5 | 84 | \*\*CONTINUOUS\*\* |
| Review and Final Exam | 6 | 90 | June 12 |

**Grading policy**: 60% class work; 25% assessments; 15% homework.

**Text:** Glencoe Algebra 2 Text also available online at <http://algebra2.com>

**Log in** ALG2 **Password** N4c6abrada

**Materials Required**

* **Three-ring binder** or pocket folder to keep your note sheets
* **Lined paper**(either in a spiral notebook or in your three-ring binder) for classwork and for taking notes
* **Graphing Calculator** (TI-83+ or TI-84) – A calculator is critical to success in high-school mathematics and will be especially useful in college level mathematics as well. You may choose a different brand other than Texas Instruments, but I cannot guarantee I will be able to assist you with brands other than Texas Instruments
* **Pencils**– As most math teachers do, I have a strict policy against using pens in mathematics. I **will not** accept work done in ink. Please come prepared with at least two pencils daily.
  + Please understand that I have over one hundred students each year and cannot furnish supplies to all of them. It is **your responsibility** to come to class prepared **every day**. Inability to complete the daily class work based on a lack of preparedness will result in a grade deduction for that day’s class work.

**Edmodo:** Each student will need access to the internet. Edmodo is the class website and all announcements, including homework, will be posted on the website. An access code for your class will be given out in the beginning of the school year.

**Grading:** Grades will be posted via BCPS one daily and quarter grades will be determined as follows:

* **60% from class work**-This will include: class notes, skill checks, practice problems, cooperative learning exercises, and exit tickets.
* **25% from assessments –** This will include quizzes, notebook checks, and unit tests.
* **15% from homework** **–** Homework will be checked for completion daily. On random occasion it may be checked for accuracy through collection.

**Classroom Rules and Policies:**

* Abide by all school rules while in the classroom (absences, lateness, head gear, electronic devices, etc.)
* Come to class prepared and on time
* Attend to personal needs before coming to class
* Begin the warm up within two minute of the tardy bell
* Treat others and the classroom with respect
  + Talk only when permitted
  + Use polite speech and body language
  + Do not cheat
  + Follow the teacher’s directions immediately
* **ABOVE ALL…BE RESPONSIBLE, BE RESPECTFUL, AND BE READY TO WORK**

**Make-up work:** If you are absent and have an excuse note from the main office, you have two class days to make up your work for full credit. Makeup work will be located in the “While You Were out Bin**”. IF YOUR ABSENCE IS UNEXCUSED, you may not make up the work.**

**Coach Class:** My coach class will be held on Wednesdays and Thursdays from 2:30 – 3:15 in room 205. Additional coach classes will be held throughout the week with other math teachers which you are welcome to attend.

**Extra Credit:** Can be earned by completing the “Problem of The Week” which is posted in the classroom. Each student will have until 8:00 pm to submit their answers online. You can also bring in classroom supplies such as 4 AAA batteries, tissues, hand sanitizer, pencils, etc. Credit will only be given out for 1 item per quarter.

**Contacting Mr. Hopkins:** Please use my email address [bhopkins@bcps.org](mailto:bhopkins@bcps.org) for most communication; you may use email to send me absence notes, to request a conference, or to get assignments if your child is absent. I can also be contacted through the BCPS One website at [bcpsone.bcps.org](http://www.bcpsone.bcps.org) or through ezmath123.weebly.com. Much of the work we do I have in digital form and can be accessed through that website.

**Online Resources:**

* [**www.edmodo.com**](http://www.edmodo.com) **Class Website**
* [www.justmathtutoring.com](http://www.justmathtutoring.com) FREE video lessons
* [www.khanacademy.com](http://www.khanacademy.com) FREE video lessons
* [www.kutasoftware.com](http://www.kutasoftware.com) FREE basic trigonometry worksheets