Introduction:

Welcome! Mathematics is a required course through to and including Grade 11 (note: if you plan to go on to post-secondary, it is very likely you will need a Math 12). Please note that Pre-Calculus 12 will likely not be offered as a double-block next year.

You can be successful this year by doing the following:

- Attend all classes. If you must miss a class, you are responsible for material covered in class that day.

  Note: Any work due on the day you are absent, must be handed in the day you return to class.

- Be on time for class. If you are late, please sign in on the clipboard quietly and do not disturb the class. If you are frequently tardy, you will have to make up the time after school or at lunch.

- Make sure you bring all the necessary equipment with you. This includes:
  - text
  - pencils, pens, erasers, rulers, agenda, and calculator (we will only use a calculator in a few sections of the course.)
  - binder with lined paper and graph paper

- Do your homework and complete all assignments. Homework helps reinforce what is explored in class. It is important that you keep up to date. Homework and assignments are due at the BEGINNING of the class on the due date given. Late work will not be accepted.

- Do your own work. Copying other students’ assignments/homework/quizzes/tests does not help you learn the material. Please read the policy on cheating in your agenda.

- If you miss a quiz or test, you must do the following in order to be allowed to write:
  - bring an acceptable written explanation from a parent/guardian that includes a contact phone number/email.
  - take the initiative to make arrangements to cover what was missed (i.e. see me outside of class time to set up a time to write the test/quiz)
  - if you are away for an extended absence, you are responsible for the material covered in class and should be ready to take the test/quiz on the day the it is scheduled.
There will be a **FINAL EXAM** in June that will account for 20% of your FINAL MARK.

**Topics to be Covered:** The course covers the same learning outcomes as the other Pre-Calculus 11 Courses, but this course is taken daily to allow the students more time to absorb the material.

**Chapter 1 - Sequences and Series**
- 1.1 Arithmetic Sequences
- 1.2 Arithmetic Series
- 1.3 Geometric Sequences
- 1.4 Geometric Series
- 1.5 Graphing Geometric Sequences and Series
- 1.6 Infinite Geometric Series
- Review

**Chapter 2 - Absolute Value and Radicals**
- 2.1 Absolute Value of a Real Number
- 2.2 Simplifying Rational Expressions
- 2.3 Adding and Subtracting Radical Expressions
- 2.4 Multiplying and Dividing Radical Expressions
- 2.5 Solving Radical Equations
- Review

**Chapter 3 - Solving Quadratic Equations**
- 3.1 Factoring Polynomial Expressions
- 3.2 Solving Quadratic Equations by Factoring
- 3.3 Using Square Roots to Solve Quadratic Equations
- 3.4 Developing and Applying the Quadratic Formula
- 3.5 Interpreting the Discriminant
- Review

**Chapter 4 - Analyzing Quadratic Functions**
- 4.1 Properties of a Quadratic Function
- 4.2 Solving a Quadratic Equation Graphically
- 4.3 Transforming the Graph of $y = x^2$
- 4.4 Analyzing Quadratic Functions of the Form $y = a(x - p)^2 + q$
- 4.5 Equivalent Forms of the Equation of a Quadratic Function
- 4.6 Analyzing Quadratic Functions of the Form $y = ax^2 + bx + c$
- 4.7 Modelling and Solving Problems with Quadratic Functions
- Review
Chapter 5 – Graphing Inequalities and Systems of Equations

5.1 Solving Quadratic Inequalities in One Variable
5.2 Graphing Linear Inequalities in Two Variables
5.3 Graphing Quadratic Inequalities in Two Variable
5.4 Solving Systems of Equations Graphically
5.5 Solving Systems of Equations Algebraically

Review

Chapter 6 - Trigonometry

6.1 Angles in Standard Position in Quadrant 1
6.2 Angles in Standard Position in All Quadrants
6.3 Constructing Triangles
6.4 The Sine Law
6.5 The Cosine Law

Review

Chapter 7 – Rational Expressions and Equations

7.1 Equivalent Rational Expressions
7.2 Multiplying and Dividing Rational Expressions
7.3 Adding and Subtracting Rational Expressions with Monomial Denominators
7.4 Adding and Subtracting Rational Expressions with Binomial and Trinomial Denominators
7.5 Solving Rational Equations
7.6 Applications of Rational Equations

Review

Chapter 8 – Absolute Value and Reciprocal Functions

8.1 Absolute Value Functions
8.2 Solving Absolute Value Equations
8.3 Graphing Reciprocals of Linear Functions
8.4 Using Technology to Graph Reciprocals of Quadratic Functions
8.5 Graphing Reciprocals of Quadratic Functions

Review
**Electronic Devices:**

The **ONLY** electronic device permitted in the classroom is a **scientific calculator**. Unless we are using them as a class, other devices such as cell phones, tablet computers, ipods, iphones, ipads, blackberries, lap top computers, cameras, video game players, and electronic dictionaries will be confiscated if found in use during class time.

**Classroom Procedure:**

- **Conduct** - It is assumed that you will treat others with respect and courtesy. You will act responsibly and will not engage in any inappropriate behaviour.
- **Cheating** - Cheating is not tolerated! Anyone caught cheating will get an automatic zero and will be sent to the administration where he/she will be dealt with accordingly. There is never any excuse for cheating, so just don’t do it.

**Email/Contact**

If you or your parents would like to contact me, please go to my [Webpage](http://uhillmathmrlow.weebly.com) and fill out the contact form:

http://uhillmathmrlow.weebly.com

Also here to find out what homework is assigned, dates of tests/quizzes and other helpful information.

**Please have your Parent / Guardian fill out the following, detach and return me by next class**

<table>
<thead>
<tr>
<th>Student's Name</th>
<th>Block</th>
</tr>
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<tbody>
<tr>
<td>Parent's / Guardian's Name(s)</td>
<td></td>
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<tr>
<td>Email address of Parent / Guardian</td>
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<td>Signature of Parent / Guardian</td>
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<td>Date:</td>
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