**Grade 10 Math Course Outline**

**Units of content to be covered in course:**

* SI and imperial units of measurement
  + linear measurement
  + surface area of spheres, right cones, cylinders, prisms, pyramids
  + volume of spheres, right cones, cylinders, prisms, pyramids
  + relationships between and within measurement systems
* Trigonometric Ratios (sine, cosine, tangent) to solve problems that involve right triangles (Pythagorean Theorem)
* Factors of Whole Number
  + prime factors
  + greatest common factor
  + least common multiple
  + principal square root
  + cube root
* Multiplication and Factoring of Polynomial Expressions
  + multiplying of monomials, binomials, and trinomials
  + common factors
  + trinomial factoring
  + relating multiplication and factoring of polynomials
* Irrational Numbers
  + radical numbers
  + exponent forms including exponent laws
* Relations and Functions
  + relating data, graphs, and situations
  + analyzing and interpreting
  + distinguishing between relations and functions
* Slope
  + line segments and lines
  + rate of change
  + ratio of rise to run
  + parallel lines
  + perpendicular lines
* Linear Relations
  + ordered pairs, tables of values, graphs, function notation, equations
  + intercepts, slope, domain, range
  + relating equation forms to each other and to graphs
* Writing and Applications of Equations of Linear Relations
* Systems of Linear Equations

**Evaluation:**

Summative Assignments = 50%

Exams = 50%

The final year mark will be based on the following:

Terms 1 and 2 = 75%

Final Exam = 25%

**Expectations and Important Information**

*In order to create the most effective classroom atmosphere with the highest level of success, we must create a safe environment that encourages each of us to set and achieve goals. The following must be adhered to in order to succeed.*

1. Give attention and respect to others opinion and the opportunity to voice that opinion.

2. Do not allow yourself to be distracted by electronic devices.

a. **No cell phones.**

b. No iPod Touches or other hand held devices unless permission is granted **that day** by the teacher.

3. Be in the classroom with all materials needed for the class before the bell.

4. If you are late, quietly join the class.

a. If the door is closed, knock and wait for the door to be answered.

b. Catch up on what is happening quickly.

5. Be responsible.

a. You are responsible for any and all assignments when absent. If absent, you are required to find out what was missed.

b. If you know you will be missing prior to the date, feel free to ask, at an appropriate time, what we will be doing. I will do my best to provide you with materials and instruction so you will not fall behind.

6. It is your responsibility to **ask questions immediately** when you do not fully understand the concepts being taught. Reviewing is a skill you should be developing on your own. If you need help on how to study please come to see me.

7. There will be questions/assignments given almost every day. You will not necessarily be given class time to finish the questions/assignments, but they MUST be completed on the due date.

8. Assignments

a) If assignments are not complete on the date that they are due, they MUST be handed in on that date nonetheless. There are then two options which will be chosen by your teacher. One is that you still complete the assignment. This will require that you stay at a time which is convenient **for your teacher**. The second option is that you will be given a completely new assignment. *Exceptions:* by ***prior*** arrangement or sickness.

b) Late assignments will be accepted and reassessing assignments will be allowed until the test for each outcome. Following the test for the outcome, no further reassessing will be allowed and late assignments will NOT be accepted.

c) You may get assistance your teacher and classmates when working on formative assessments. However, if you receive any assistance or copy any work on summative assignments there will be consequences ranging from having to re-do the assignment (at a time chosen by your teacher) to losing credit for the course.

9. If you need extra help, PLEASE do not leave it until the week before the final exam.

I will be available at lunch most days to assist you with any difficulties you may be having and/or to allow you to reassess or complete late assignments. Miss Bittorf will be available for help before school and Ms. Peri will be available after school if necessary.

10. Tests:

a) You will always be notified of an exam at least a few days (often a week) ahead of time. All students will write the exam on the appointed day.

b) If you are aware that you will be absent on the day set for an exam you must notify your teacher immediately. If you miss an exam for a legitimate reason, you must bring a note of explanation from home when you return to class, and make arrangements as soon as possible to write the exam.

c) Exams are considered the assessment of what has been mastered. Re-writes will not be allowed unless a majority/the entire class needs to be retaught and re-assessed.

11. Homework and assignments along with test dates will be listed daily on my webpage which you access from the Macklin School website.

( www.macklin.lskysd.ca )

**To be successful in Math 10 you should do most of the following:**

* ask questions during class when you don’t understand.
* ensure due dates are met.

Use your time productively in class by:

* doing math in math class rather than other course work.
* staying focused on the task at hand rather than wasting valuable assignment and practice time socializing.
* completing and correcting homework and assignments AS SOON AS POSSIBLE AFTER THEY ARE ASSIGNED. Delaying doing them until the night before the exam will result in frustration with the material.
* getting notes/examples and completing missed work immediately following any missed math class.
* coming for help when you are struggling well before an exam or the due date of an assignment (before school, at lunch, or after school). Often 5 to 10 minutes is all that is needed to clarify a concept or procedure.
* studying in advance for quizzes and exams.

**Student Learning Contract**

* I acknowledge that I have read and understand the requirements of this class. I am responsible for keeping up to date. I will not use I forgot or I didn’t know it was due today as an excuse.
* I am responsible for asking questions when I do not understand the content presented. I will not use I didn’t understand or know as an excuse for not completing an assignment on time. It is my responsibility to bring to the teacher any questions, comments and reactions to this course that affect my ability to learn.
* I understand that this class will use active learning and cooperative learning teaching techniques. This will require participation and involvement on my part.
* I am responsible for knowing assignment dates and deadlines and for meeting these. I understand that late work will result in me having to stay after school or at lunch.
* I acknowledge that the teacher is not responsible for decisions I make about how I spend my time, such as extracurricular activities, jobs, social life, or waiting until the last minute to complete assignments. My life is my responsibility.

Signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent signature \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_