



Loyola High School  
**Secondary 1 Mathematics**  
2018 – 2019

<b>Teacher:</b>	<b>Email:</b>	<b>Phone:</b>
M. de Verteuil	<a href="mailto:deverteuilm@loyola.ca">deverteuilm@loyola.ca</a>	514-486-1101 ext. 613
T. Powell	<a href="mailto:powellt@loyola.ca">powellt@loyola.ca</a>	514-486-1101 ext. 632
T. Shaughnessy	<a href="mailto:shaughnessyt@loyola.ca">shaughnessyt@loyola.ca</a>	514-486-1101 ext. 651

**Supplies:** Duo-tangs, loose leaf sheets, pencils, eraser, ruler, protractor

**Resources:** Loyola Math Unit Booklets. Teacher handouts and worksheets  
A subscription to IXL is provided by Loyola.  
Students must use their **Loyola IXL** account.

Website: Course Moodle site/Google Classroom  
Resource Math Page: [http://vweb.loyola.ca/powellt/Math1\\_D/sec1index.htm](http://vweb.loyola.ca/powellt/Math1_D/sec1index.htm)

**Evaluation:** **Term mark distribution:** Term 1 - 20%    Term 2 – 20%    Term 3 – 60%.

**Competency 1: Situational problems: 30%.**

**Competency 2: Communication & Reasoning: 70%**

Tests: 50%, Quizzes, assignments/homework: 20% (Final weightings may vary).

**Exams:** At least one Situational Problem will be given each term.  
A mid-year evaluation will be written on the December Exam day  
The June exams cover the entire year's work and worth 50% of the overall course grade.

**Homework:** Homework is normally assigned daily with time given in class to begin (15-30 minutes).  
It will be checked regularly and marked sporadically. Review and practice are essential to understanding and retaining the information taught.  
Failure to complete homework will result in a loss of marks and/or disciplinary action.

**Quizzes:** Quizzes are given without prior warning to evaluate day-to-day understanding of the material.

**Tests:** Class tests will evaluate the course content and different competencies. Students are given prior warning and are responsible for advising his parents/guardian about test results.

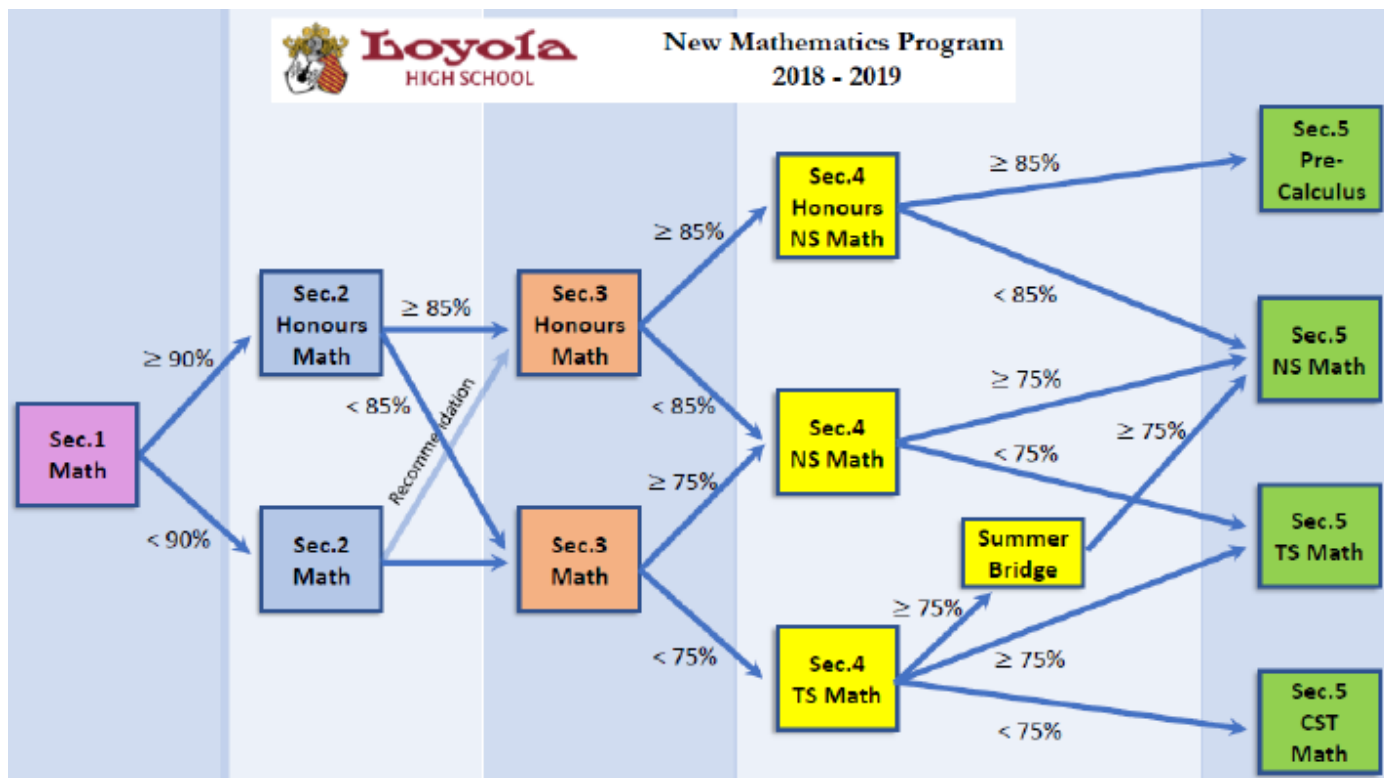
**Technology:** iPads must be charged and be ready for use. iPads remain in bag until requested.

**Tutorials:** Teachers will post tutorials and office hours. *Math Extra Help* is available days 1-8 afterschool in room 251.

**Course Content:**

In this course students are taught to develop number sense and how to manipulate numbers, allowing them to represent and solve many types of problems. Mathematics is presented to the students as a precise and logical language. Specifically, students are taught the order of operations and how it applies to the set of Rational Numbers. Other topics covered are decimals, fractions, percentages and their interrelationships; geometry definitions, geometric constructions and measurement of area; algebraic theory and an introduction to basic statistics.

**Advancement:** Students whose overall grade is greater than or equal to 90% and receive a teacher recommendation at the end of the school year, will have the opportunity to pursue an Honors Math course in Secondary 2. Secondary 2 honors Math is an advanced Math course preparing students to continue into secondary 3 honors Math where students would be learning concepts at the secondary 4 level. As such, a final minimum course grade of 85% is required to pursue NS Math (Science profile) in Sec. 3; otherwise students will be placed into a regular secondary 3 Math class next year. Students are expected to further develop their work ethic, study habits and time management skills as they continue their progress in becoming independent and active learners.



## Detailed Course Outline – Sec. 1 Math

<b>Number Sense:</b>	Factors and Multiples, Prime/composite numbers, Prime factoring LCM/GCF – Understanding, “L” method Divisibility Rules for 2, 3, 4, 5, 6, 8, 9, 10, 11, 12 & 25 Order of Operations (BEDMAS) Properties of powers/Square roots
<b>Decimals:</b>	Comparing/ordering, Reading/writing numbers, Rounding/estimating Expanded Notations: Standard form, expanded forms Scientific notation Multiplication/division by powers of 10 Addition and Subtraction rules, Multiplication & Division algorithm Order of Operations (BEDMAS) and exponents Perimeter and Area
<b>Integers:</b>	The Integer line, Comparing/Ordering Addition rules, Subtraction rules (add the opposite) Multiplication and Division rules Exponents (importance of brackets) Order of Operations (BEDMAS) Plotting points on the Cartesian plane Absolute value
<b>Statistics:</b>	Definitions/data collection, Constructing tables Mean, mode, median, range Interpreting/constructing: Bar graph, broken line graph, circle graph, pictograph.
<b>Fractions:</b>	Equivalent fractions, Comparing/Ordering, Simplifying/writing as decimals Mixed numbers/improper fractions Addition and Subtraction rules, Multiplication and Division rules Exponents, Square roots Order of Operations (BEDMAS) Perimeter and Area
<b>Percents:</b>	Converting Fractions/Decimals/Percents Calculating percent of a number Working backwards Applications: Discount, mark-up, taxes, commission, depreciation
<b>Geometry:</b>	Definitions & properties: lines, angles, parallel lines, types of angles Measurement: length, angles Triangle and Quadrilateral properties Perimeter and area: Triangles, quadrilaterals, composite shapes
<b>Algebra:</b>	Algebraic properties: Commutative, Associative, Distributive Additive/Multiplicative identity, Additive/Multiplicative Inverse Variable expressions (replacement) Terms and polynomials Adding/subtracting polynomials Simplify Algebraic Expressions Solving Algebraic Equations