**Mathematics 10 (Academic) Halifax West High School**

**September 2016 – June 2017**

**Ms. Spear**

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**Description:**

Mathematics 10 is an academic high school mathematics course which is a pre-requisite for all other academic and advanced mathematics courses. Students who select Mathematics 10 should have a solid understanding of mathematics from their junior high years. This means that students would have demonstrated satisfactory achievement of outcomes in grade 9 math.

Topics include: measurement systems, surface area and volume, right triangle trigonometry, exponents and radicals, polynomials, linear relations and functions, linear equations and graphs, solving systems of equations, and financial mathematics.

Two credits: one Math credit at grade 10 level and one “other” grade 10 credit towards NS Graduation requirements

Measurement (25%): Imperial and metric measure; Surface area; Volume; Trigonometry ratios; Problem solving

Algebra and Number (25%): Factors and multiples; Perfect squares and perfect cubes; Multiplying polynomials; Factoring polynomials; Radicals; Exponents; Laws of exponents

Relations and Functions (30%): Graphs; Linear relations; Slope; Parallel and perpendicular lines; Equations of lines; Distance and midpoint; Systems of linear equations; Problem solving

Financial Mathematics (20%): Currency exchange; Income; Personal budgets

**Materials:**

loose leaf, graph paper, course binder, pencils and eraser, scientific or graphing calculator, ruler (with imperial and metric units)

**Texts:**

Foundations and Pre-Calculus Mathematics 10 (Pearson), Financial Mathematics (McGraw-Hill Ryerson)

**ASSESSMENT**

Exam: The provincial exam will be based on the entire year and is worth 20% of the final grade. The exam will be written in June.

Tests: Tests are major assessments and will be announced several days in advance. Expect tests to be cumulative throughout the year.

Quizzes: Quizzes provide opportunities to assess ongoing progress and give indications as to whether extra help is needed. Quizzes are generally short and will be announced in advance.

Assignments: Assignments will be given and graded on a regular basis. They may be in class or take home, individual or group effort, as indicated by your teacher. Submissions will not be accepted after the corrected assignments have been handed back to students.

Homework Probes: Homework probes are unannounced short evaluations based on recent work. Students must be sure to keep up with their work on a daily basis and come in for extra help when needed.

Note: Marks throughout the semester will adhere to these proportions:

Tests and Quizzes 60%

Assignments and Homework Probes 40%

**\*\* Absence from an assessment will require a written excuse from a parent or guardian upon your return to class. Failure to do so will result in a mark of zero for that assessment. You will be expected to make up missed tests.**

If you are absent from class, it is your responsibility to catch up on any missed work. Check the class website, ask classmates for notes, and see your teacher to get any handouts. Any assignments due during your absence will be due at the beginning of class on the day you return (provided a note excusing your absence has been presented to your teacher).

Graphing calculators will be provided for use during class and on tests. If you have your own graphing calculator, you can use it for assessments provided it has been approved by your teacher. Students must have their own calculator for use at home and on the NSE final examination (June).

Don’t hesitate to ask questions when you need help. Extra help is available.