** CHARLES P. ALLEN HIGH SCHOOL ∞ MATHEMATICS DEPARTMENT ∞**

**MATH 10/11 ESSENTIALS COURSE OUTLINE**

**Teaching Staff 2015 – 2016:**

* Colleen MacDonald colleen.macdonald@hrsb.ns.ca Room 235

**Prerequisite:** Successful completion of Mathematics: Grade 8 and recommendation from the mathematics grade 9 teacher.

**Textbook:** Math For Everyday Life

**Course Outline:**

**Buying Decisions Assessment: 10%**

• the best buy

• incentives to buy

• cross-border shopping

• buying decisions

**Probability Assessment: 10%**

• making predictions and decisions

• probability experiments

• simulations

**Measuring and Estimating Assessment: 10%**

• the metric and imperial systems

• measuring lengths

• estimating

**Transformation and Design Assessment: 10%**

• geometric aspects of design

• investigating design using technology

• designing a logo

• tiling a plane

• designs involving tiling patterns

**Buying a Car Assessment: 10%**

• a driver’s license

• owning and operating costs

• the costs of irresponsible driving

**Mental Math Assessment: 15%**

• doubling and relating facts

• adding facts

• percent

• multiplying and dividing by 10, 100, and 1000

**Working and Earning Assessment: 10%**

• finding a job

• salary

• hourly rates and overtime rate

• commission

**Deductions and Expenses Assessment: 10%**

• deductions

• living expenses

• comparing expenses

• purchasing power

**Paying Taxes Assessment: 15%**

• provincial and federal sales taxes

• other forms of taxation

• making change

• getting back fewer coins

• taxes and total cost

• discounts and sale prices

• sale prices, takes, and total cost

**Assessment:**

**Assessment** is the process of gathering, from a variety of sources, information that accurately reflects how well a student is achieving the learning outcomes in a subject or course.

A) **Formative assessment** is to show growth over time, determine student needs, plan next steps in instruction, and provide students with descriptive feedback.

B) **Summative assessment** is to determine the extent to which learning has occurred for students.

**Evaluation** is the process of analyzing, reflecting upon, and summarizing assessment information and making judgments and / or decisions based on the information gathered.

Unit assessments will consist of multiple opportunities for a student to demonstrate their understanding of the outcomes. Such opportunities include (but are not limited to) tests, quizzes, in-class assignments, portfolios, comprehension questions, and projects. Teachers will employ both formative and summative assessments in gathering information to determine a student grade. No one method of assessment will be worth more than 50% of the unit.

Throughout the semester, students may feel that they have not successfully demonstrated their understanding of particular outcomes and would like another opportunity to demonstrate that they now “Get It”. Please refer to the Multiple Opportunities document on teacher/school website for more details.

Mathematics courses require commitment and students must take responsibility for achieving the outcomes. Students need to make sure that they keep up with the work and seek help early if they encounter difficulties before they become insurmountable. Extra help is available, please check with your teacher for times.

***Students are permitted to exempt the final exam.***

**Final Assessment:** 80% Course Outline

 20% Final Exam

**Continuous School Improvement (CSI):**

*Literacy Goal: Students will develop their critical thinking skills.*

*Math Goal: Students will develop their mathematical critical thinking skills with a focus on improving achievement on Analysis questions (formerly called level three questions).*

Levels of cognitive demand include **Knowledge, Application and Analysis**. Analysis, a level 3 question, is one in which students have the necessary skills/tools to solve a problem which is unfamiliar. This requires higher order thinking skills and problem solving techniques. Throughout the course of this year, as part of our CSI goal, teachers in the math department will expose their students to these types of problems and give them strategies that will help refine their critical thinking skills.

**Communication of Student Achievement:**

A collaborative effort of all stakeholders (student / parent/ teacher) is important to ensure student academic success. In an effort to maintain communications, a number of avenues are available.

* Class Web sites are updated daily
* Marks and attendance can be checked at any time on the Parent/ Student Portal of Powerschool. (If you do not have a password for the portal, please contact the main office)
* The Auto-dialer calls home regarding unexcused absences and upcoming events.
* Parents and students are encouraged to contact the teacher via email if they have any concerns regarding academic progress.
* Important dates include:
	+ Curriculum night: September 15, 2015
	+ Parent/teacher interviews: November 25th (evening) & November 26th (afternoon)
	+ Multiple Opportunity Testing week: January 4-8, 2016