# Essential Math 40S - Course Outline 

Credit Value: 1 credit
Course Code: 3000
Prerequisites: None
Textbook: Etienne, S. et al. Math at Work 12. McGraw-Hill Ryerson. Whitby, ON. 2012.

## Mathematical wisdoms...

"Mathematics is a game played according to certain simple rules with meaningless marks on paper."

- David Hilbert
"In mathematics, you don't understand things. You just get used to them."
- Johann von Neumann
"There are two ways to do great mathematics. The first is to be smarter than everybody else. The second way is to be stupider than everybody else -- but persistent."
- Raoul Bott


## Course Description

Grade 12 Essential Math is a course designed for students who do not plan to attend postsecondary institutes to study mathematics or science related fields. The purpose of this course is to prepare students for the world of math that awaits them after high school.

A major focus in this course is the application of math across various real world settings, including buying a vehicle or house, paying taxes, owning a business, and shopping for discounts. Logical reasoning and critical thinking will also be stressed in the course, as students will be required to make informed decisions from data gathered. This course will also include a career life project that will require students to prepare a detailed outline of their personal and financial goals for the next 5 years.

With the new timetable this year we will only have classes on 3 of the 6 days in the cycle. Given the new structure of the course, there will be increased emphasis on homework and assigned practice. It will not be marked, but is important to strengthening understanding.

## Course Timeline

Sept. 4 - 11 12E.5.S. 1 - Measures of Average
Sept. 13-20 12E.5.S. 2 - Percentile Rank
Sept. 21 - Nov. 6 12E.5.V.1, H.1, B.1\&2-Finances
Oct. 28 - Nov. 9 Career Life Project

Nov. 12 - 29 12E.6.G.1,2 - Triangles \& Polygons
Nov. 30 - Dec. 13 12E.5.P. 1 - Precision \& Accuracy
Dec. 14 - Jan. 16 12E.6.P. 1 - Probability
Jan. 17-24 Review

Assessment - The curriculum is available at https://www.edu.gov.mb.ca/k12/cur/index.html

Course Work (80\%) - Each outcome (or cluster of outcomes) will have a number of formative assessments to help students determine their level of understanding, as well as a final assessment that is weighted according to the amount of time allotted to that section of the course. There are also two major projects that will be completed in this course that will be assessed according to a class constructed rubric.

Final Exam (20\%) - This is a Provincial Exam in this course this year scheduled for January $24^{\text {th }}$. The goal is to spend the last few classes preparing for this final assessment, provided the major sections have been completed.

Academic Dishonesty - any act of cheating, plagiarizing, or copying of work by a student will result in stiff penalties. The first offense will be a choice of zero on the assessment or a redo at my convenience, as well as a letter sent home to your parents. The second offense will be an automatic zero, with a referral to administration for any further discipline.

Late Assignments - There are no assignments in this course. Both major projects are due on or before the date set. Other than medical emergencies and prior arrangements, failure to do so will result in a grade of 0 .

Missed Assessments \& Rewrites - Any missed assessment will be given a grade of 0 unless valid reasons are given (eg. hospitalization). A student who misses an assessment will be required to complete it during the lunch hour (or spare) on the day they return to school.

Assessments can be rewritten upon the request of the student, but will only be granted after that student has earned the opportunity. This requires attendance at lunch (or spare) for extra help and practice, as well as multiple formative assessments in order to demonstrate sufficient understanding.

## Keys to Success...

- Study for tests and exams
- Come in for extra help when needed
- Make Mistakes. It helps you recognize when you're doing things right.

