Teacher:

Course Title	Course Code	Credit Value	Prerequisite
Grade 12 Foundations for College Mathematics, College	MAP4C1	1.0	MBF3C1 or MCF3M1

TEXTBOOK: Foundations for College Mathematics 12- McGraw-Hill Ryerson, 2009
(Replacement Cost: $135)
REQUIRED MATERIALS: Graph paper, notebook, writing utensils, and a scientific calculator. The only approved calculator for tests, quizzes, and assignments is the
SHARP EL-510 https://www.staples.ca/products/437262-en-sharp-el510rtb-scientific-calculator-white
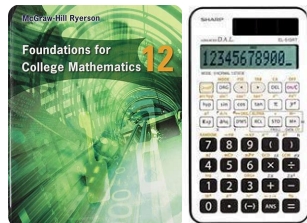
COURSE DESCRIPTION

This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyse data using statistical methods; solve problems involving applications of geometry and trigonometry; solve financial problems connected with annuities, budgets, and renting or owning accommodation; simplify expressions; and solve equations. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for college programs in areas such as business, health sciences, and human services, and for certain skilled trades.

OVERALL EXPECTATIONS By the end of this course, students should be able to:

Mathematical Models
- evaluate powers with rational exponents, simplify algebraic expressions involving exponents, and solve problems involving exponential equations graphically and using common bases
- describe trends based on the interpretation of graphs, compare graphs using initial conditions and rates of change, and solve problems by modeling relationships graphically and algebraically
- make connections between formulas and linear, quadratic, and exponential relations, solve problems using formulas arising from real-world applications, and describe applications of mathematical modeling in various occupations

Personal Finance
- demonstrate an understanding of annuities, including mortgages, and solve related problems using technology
- gather, interpret, and compare information about owning or renting accommodation, and solve problems involving the associated costs
- design, justify, and adjust budgets for individuals and families described in case studies, and describe applications of the mathematics of personal finance

Geometry and Trigonometry
- solve problems involving measurement and geometry and arising from real-world applications
- explain the significance of optimal dimensions in real-world applications, and determine optimal dimensions of two-dimensional shapes and three-dimensional figures
- solve problems using primary trigonometric ratios of acute and obtuse angles, the sine law, and the cosine law, including problems from real-world applications, and describe applications of trigonometry in various occupations

Data Management
- collect, analyze, and summarize two–variable data using a variety of tools and strategies, and interpret and draw conclusions from the data
- demonstrate an understanding of the applications of data management used by the media and the advertising industry and in various occupations

ASSESSMENT AND EVALUATION BREAKDOWN

To promote student success, ongoing assessment and feedback will be given regularly to the students. A variety of assessment and evaluation strategies will be used in this course, **including quizzes, tests, assignments**. Expectations will be evaluated based on the provincial curriculum expectations and the achievement levels outlined in the ministry document. Expectations are organized into four categories of knowledge and skills. The course evaluation is broken down according to the strands and percentages listed below:

Term Evaluation 70 %		Final Evaluation 30 %	
Knowledge and Understanding	20 %		
Thinking	15 %	Final Exam…… up to	30%
Communication	15 %	Summative…… up to	20%
Application	20 %		

Learning Skills
The evaluation of learning skills (responsibility, collaboration, independent work, organization, self regulation, and initiative) will be reported as needs improvement, satisfactory, good or excellent. Students will find that concentrating on these skills will result in a higher level of success in meeting the course expectations.

General Expectations:
Regular and punctual attendance, daily homework practice, active participation in class activities, and a positive attitude are the most effective ways to ensure success in the course. Please enter the classroom with the mindset of teamwork and respect. If you are late, you are to go to the office to obtain a late slip prior to coming to the class.

Due Dates & Test Dates:
Students are responsible to hand in work in accordance with the due date. In the case of a known absence (e.g., a field trip, a sports meet, or an unavoidable medical appointment) on the day an evaluation is scheduled, a student must speak to the teacher in advance and provide acceptable documentation to arrange an evaluation makeup opportunity during lunch or after school at the teacher's discretion. In the case of an unexpected absence, a student must communicate with the teacher on the day upon return to school to make alternate arrangements. Failure to do so may jeopardize any makeup opportunity. Once a marked evaluation is returned to the class, a student can no longer make up for the missed evaluation, and a mark of zero will be issued.

Student Accommodations:
Appropriate accommodations for exceptional and ELL students are provided by the teacher in accordance with the recommendations as outlined in each identified student's Individual Education Plan (IEP) and/or Annual Education Plan (AEP). Please speak to your teacher if you have an IEP or need any accommodations to support your success. Open communication between students and the teacher is key to math learning in the classroom.
If you have an IEP, please inform your teacher within the first days of class so accommodations can be implemented right away.

Absences:
You are responsible for any work missed while you are away. It is best to find out what was covered up in class. Class material will be provided on the digital platforms used in class (Brightspace, OneNote, Google Classroom)

Extra Help and Homework:
Extra help is available several days a week after school, and during lunch. Most classes will begin with homework help. Homework is assigned on most days. Homework is expected to be completed on a regular basis.

Respect and Behaviour:
Students and parents should make themselves aware of the contents of the North Toronto Code of Respect and Behaviour. This document contains the specifics regarding school expectations, and procedures for attendance and evaluations. This can be found on the NTCI website, at https://www.northtorontoci.ca/.

We look forward to supporting your mathematics learning journey!

Note: Information provided by this course outline is subject to change without further written notice.