Bloor Collegiate Institute
Mathematics Department

Course: Foundations for College Mathematics Grade 12 College Preparation

Course Code: MAP4C

Course Description

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

TDSB Equity Statement

a. the Curriculum of our schools accurately reflects and uses the variety of knowledge and ways of knowing of all peoples as the basis for instruction; students both see themselves and the Diversity and differences of others and the wider world reflected in their learning environments; it actively educates students to understand the causes and impacts of inequity in society, and to understand the similarities, differences, Intersectionality of multiple social identities and the connections between different forms of Discrimination and social Power Imbalances, systemic Oppression, Privileges and the Bias and Barriers that support them; and

b. It helps students to acquire the skills and knowledge that enable them to challenge unjust practices, and to build a strong sense of self, positive and healthy human relationships among their fellow students, and among all members of society.

In-Person at School	Independent Learning at Home
Regular attendance *Readiness for learning with necessary materials and resources* *Active participation and engagement in class activities*	*Learn on your own, guided by your teacher's direction* *Complete homework, assigned readings, and activities* *Complete tasks related to evaluations* *Group work IF set up to collaborate* *Generating questions for teachers to address in class*

Late and Missed Evaluations

Students are responsible for providing evidence of their learning within established timelines. Teachers will make students aware of the consequences for not completing work and submitting work late. Where it is appropriate to do so, a number of strategies may be used to help prevent or address late and missed evaluations* and the professional judgment of the teacher, acting within the policies and guidelines established by the ministry and board, will be critical in determining the strategy that will most benefit the student's learning. Consequences addressing missing and late evaluations may include deducting marks for late evaluations, up to and including the full value of the evaluation. At the convenience and professional discretion of the teacher, the student may be provided with an alternative evaluation if it is reasonable and appropriate to do so. If a student does not have a valid reason for their absence**, a mark of zero will be recorded**.

Where a due date is assigned to an evaluation, and in the absence of prior communication with their teacher (e.g. email) to establish a mutually agreed upon extended due date, senior students (grades 11 and 12) are expected to present evaluations on the date and time indicated by their teacher. ***This includes all students in dual credit programs!***

After this time evaluations are considered late and will be subject to a penalty at the start of the next meeting of the face-to-face class, after which an additional penalty will stand for that evaluation until the ultimate deadline. It should also be noted that once an evaluation has been returned, or the ultimate deadline has passed, any outstanding evaluations cannot be accepted for evaluation. The evaluation may still be accepted to assess a student's achievement of the course expectations, with feedback.

Every effort will be made by the subject teacher to notify students well in advance of scheduled evaluation dates.

*In the paragraphs above the word *evaluation* may refer to **any** type of assignment, presentation, test, lab, quiz, etc. that has been assigned by the teacher for the course.

Note: Detailed information on Ministry of Education assessment, evaluation, and reporting policy is provided in *Growing Success: Assessment, Evaluation and Reporting in Ontario's Schools, First Edition Covering Grades 1 to 12, 2010*.

Assessment, Evaluation and Reporting

Strategies

- Students will be evaluated on content and skills throughout the year, with a focus on all four categories of the Achievement Chart.
- Assessment and evaluation methods of student progress will vary with each unit, and over the course of the year may include: quizzes, tests, investigations, assignments, presentations, and projects, both in group and individual forms.
- Students will be assessed before engaging in unit culminating activities and will be given advance notice of timelines of specific expectations and method of evaluation.

Achievement Category Weightings

As required by the Ministry of Education, students will be assessed in the four areas of the achievement chart. The suggested breakdown for this course is as follows:

Category	Knowledge	Thinking/Inquiry	Communication	Application
Weight	30%	20%	20%	30%

Grades throughout the Semester

- The grade for each reporting period is based on evaluations that have been conducted to that point in the course, and will be *preliminary* and *tentative*. They will be based on the most consistent level of achievement to that point in time, with special consideration given to more recent evidence, but some of the overall expectations, strands, and units will not have been addressed. The student's grades will most likely change when their entire work is evaluated at the end of the course.

Coursework (70%)

- Specific evaluation dates will vary from class to class, but all dates will be clearly communicated to the students.
- Missed or incomplete assignments will have an impact on the final grade when a significant number of curriculum expectations have not been evaluated.

Course Culminating Activities (30%)

- There will be culminating activities, including a final assignment (20%) and an ongoing personal reflection journal (10%)
- Students must take part in the culminating activities, otherwise a mark of zero will be assigned. Students will be advised of dates well in advance. Missed culminating classes must be made up during mutually agreed upon time.

Learning Skills

- Learning skills play a critical role in the achievement of curriculum expectations and student success.
- Students are expected to be academically honest by submitting original work. The marks they receive are intended to reflect personal academic achievement.
- Students are also expected to be punctual and to arrive prepared for class!
- Specific information regarding Learning Skills can be found in *Growing Success: Assessment, Evaluation and Reporting in Ontario's Schools, First Edition Covering Grades 1 to 12, 2010*

Units of Study

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

design, justify, and adjust budgets for individuals and families and describe applications of mathematics to personal finance

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

Geometry and Trigonometry:
- determine optimal dimensions of two-dimensional shapes and three-dimensional figures
- solve problems involving measurement and geometry;
- solve problems involving trigonometry in triangles including problems arising from real-life applications

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

Please refer to Ontario Ministry of Education curriculum document for details of Overall and Specific Expectations.