MATHEMATICS 2019-2020

Grade	Course	Type	Prerequisite	Course Details
9	MPM1DI Principles	Academic		MPM1DI lays the foundation for future success in an Academic program. In this course, students extend their Algebraic & Geometric Skills, explore Relationships and develop Equations of Straight Lines. This course is STRONGLY recommended for those students who are working at a Level 3 or 4 in Grade 8 Mathematics.
9	MPM 1DW	Enhanced		Application and acceptance into the PHS Enhanced Program.
9	MFM1PI Foundations	Applied		Students will gain a better understanding of Number Sense, Proportional Reasoning, Measurement and Geometry in addition to exploring Relationships. This course is STRONGLY recommended for those students who are working at a Level 1 or 2 in Grade 8 Mathematics.

Grade	Course	Type	Prerequisite	Course Details
10	MPM2DI Principles	Academic	MPM1DI or MFM2PI	This course lays the foundation for success in Mathematics courses in either the U or U/C program in grades 11 and 12. The course focuses on Quadratic Relationships, Analytic Geometry and Trigonometry. **A minimum mark of 70% is suggested in MPM1DI to ensure success.**
10	MPM 2DW	Enhanced	MPM 1DW	Recommendation of grade 9 math teacher required.
10	MFM2PI Foundations	Applied	MPM1DI or MFM1PI	This course extends skills in numeracy, algebra and geometry. New Topics include: Linear Equations, Trigonometry and Quadratic Functions. Check the college calendars carefully for the math requirements. **A minimum mark of 70% is suggested in MPM1PI to ensure success; otherwise MEL3EI is recommended.**

Grade	Course	Type	Prerequisite	Course Details
11	MCR3UI Functions	University	MPM2DI or MPM2DW	This course continues to build mathematical skills and abstract thinking using Polynomial, Exponential, Discrete and Trigonometric Functions. This course leads to choices for the student to be able to take MDM4U, MHF4U. **A minimum mark of 70% is suggested in MPM2DI to ensure success.**
11	MCR 3UW	Enhanced	MPM 2DW	Recommendation of grade 10 math teacher required.
11	MCF3MI Functions and Applications	University/ College	MPM2DI or MFM2PI	This course builds mathematical skills using an application focus. Quadratic, Exponential and Trigonometric Functions will be used. Required path for many college and some university programs. Success in this course enables the student to take <u>one</u> 4U math, MDM4U. **Recommended for students with a final mark below 70% in MPM2DI. Recommended minimum of 80% in MFM2PI.**
11	MBF3CI Foundations for College Math	College	MFM2PI	Students will apply mathematics to solve problems involving quadratic relations, measurement and geometry, compound interest, financial decisions and data analysis. **A minimum mark of 60% in MFM2PI is suggested to ensure success in this college bound course.**
11	MEL3EI Math for Work and Everyday Life	Workplace	MFM1PI or MPM2PI	This course is intended for students who have previously taken Applied level math courses. The focus of this course is on the Mathematics of day-to-day living. Learn about payroll deductions, government taxes, banking transactions, investing and borrowing money and the costs of owning a car.

Grade 12 on the next page

MATHEMATICS 2019-2020

Grade	Course	Type	Prerequisite	Course Details
12	MHF4UI Advanced Functions	University	MCR3UI or MCR3UW	This course extends students' experience with functions. Students will investigate the properties of polynomial, rational, logarithmic and trigonometric functions; broadens their understanding of rates of change. This course is intended both for students who plan to study mathematics in university and for those wishing to consolidate their understanding of mathematics before proceeding to any one of a variety of university programs. **A minimum mark of 70% in MCR3UI or MCT4CI is suggested to ensure success in this university bound course.**
12	MCV4UI Calculus & Vectors	University	MCR3UI or MCR3UW	This course builds on students' previous experience with functions and their developing understanding of rates of change. Students will solve problems involving geometric and algebraic representations of vectors, lines and planes and continue with derivatives of polynomial, rational, exponential, and sinusoidal functions. This course is intended for students who plan to study mathematics in university and who may choose to pursue careers in fields such as physics and engineering. **A minimum mark of 70% in MCR3UI is suggested to ensure success Must be taken after or concurrently with MHF4UI.**
12	MDM4UI Data Management	University	MCR3UI or MCF3MI	This University level course is ideal for students entering Business, Social Sciences or any field that requires statistical analysis. Topics of study include: organizing data, counting techniques, probability and statistics. **A minimum mark of 60% in MCR3UI or 70% in MCF3MI is suggested to ensure success. .**
12	MAP4CI Foundations for College Math	College	MBF3CI or MCF3MI	This course provides preparation for many college programs including Business, Health Sciences and Human Services. Students solve problems involving home ownership, apply trigonometry, geometry and measurement to solve real-world applications and use statistical methods to analyze problems. **A minimum mark of 65% in MBF3CI is suggested to ensure success.**
12	MCT4CI Math for College Technology	College	**MCF3MI**	The course focus is developing skills with algebra, as well as function and graphical analysis. In addition, students will solve problems that apply algebra, trigonometry and vectors**. A minimum mark of 65% in MCF 3MI is suggested to ensure success.**
12	MEL4EI Math for Work and Everyday Life	Workplace	MEL3EI	The focus of this course is to broaden understanding of Mathematics as it is applied to of day-to-day living. Learn about applications in measurement, geometry, finance and budgeting.