



Note:

More than 1 mathematics course may be taken at each grade level for more than 1 credit. (For example a student may take both MA20SA and MA20SP for a total of 2 credits)

If you take consumer math, you cannot move to Pre-Calc or Applied without taking the pre-requisites.
i.e. It is recommended that students not move from 30SC to 40SP without first taking 20SP and 30SP.

Advanced Math 45S and Calculus 45S may be taken provided students have registered for/or completed MA40SP.

MATHEMATICS MA10F - FOUNDATION

This course provides the foundation for the various mathematics courses at the grade 10 level. The course includes algebra, geometry, equation solving, probability, statistics, trigonometry, and problem solving.

MATHEMATICS - MA20SA - APPLIED

This course is one of two math programs available for students planning to pursue post-secondary studies in mathematics and science.

This course is data-driven. Students collect data in experiments and activities, and develop mathematical concepts from analysis of that data.

The components of the curriculum emphasize:

- Technical Communications
- Use of technological equipment such as calculators, graphing calculators, and computers
- Use of spreadsheets
- Specialized measuring devices, including micrometers and calipers.

Students are expected to work both individually and in small groups and to demonstrate responsibility, flexibility and independence in their learning.

Topics include:

- Use of Spreadsheets
- Technical communication
- Exploring Math Using Technology
- Linear Models and Patterns
- 2D/3D Projects
- Relations and Functions
- Coordinate Geometry
- Measurement Technology
- Trigonometry
- Data Management

MATHEMATICS - MA20SC - CONSUMER MATH

This course is intended for students whose post-secondary planning does not include a focus on mathematics and science related fields. This is a one credit course consisting of two half credits,

Topics include:

- Problem Analysis - Part I
- Recreational Mathematics - Part I
- Spreadsheets
- Wages and Salaries
- Trigonometry
- Spatial Geometry
- Problem Analysis - Part II
- Recreational Mathematics - Part II
- Consumer Decisions
- Geometry Project
- Personal Banking
- Probability and Sampling

MATHEMATICS - MA20SP - PRE-CALCULUS

This course is designed for students who intend to study calculus and related mathematics as part of their post-secondary education.

The course comprises, primarily, a high-level study of theoretical mathematics with an emphasis on problem solving, mental mathematics, as well as cumulative exercises and testing. Students are required to learn mathematical concepts through practice and regular homework. Many of the exercises and problems are expected to be original or different from those presented in class.

Topics Include:

- Polynomials and Factoring
- Analytic Geometry
- Trigonometry
- Exponents and Radicals
- Geometry
- Rational Expressions and Equations
- Functions
- Statistics and Probability
- Variation and Sequence

MATHEMATICS 30SA - MA30SA - APPLIED

This is one of two math programs available for students planning to pursue post-secondary studies in mathematics and science. Students will continue their path of study from MA20SA.

Topics include:

- Personal Finance
- Budgets and Investment
- Geometry
- Date Management and Analysis
- Systems of Equations
- Precision Measurement
- Linear programming
- Non-Linear Functions

MATHEMATICS - MA30SP - PRE-CALCULUS

This course is designed for students who intend to study calculus and related mathematics as part of a post-secondary education.

The course comprises, primarily, a high-level of theoretical mathematics with an emphasis on problem solving and mental mathematics, supported by cumulative exercises and testing.

Students are required to learn mathematical concepts through practice and regular homework.

Many of the questions and problems on exercises, tests and examinations can be expected to be different from those presented in class.

Topics include:

- Quadratic Functions
- Trigonometry
- Algebra
- Analytic Geometry
- Geometry
- Consumer Mathematics
- Logic/Proof
- Functions

MATHEMATICS - MA30SC - CONSUMER MATH

This course is intended for students whose post-secondary planning does not include a focus on mathematics and science related fields. This is a one credit course comprising two half credits, each emphasizing consumer applications, problem-solving and decision making, as well as number sense and number use.

Students are expected to work both individually and in small groups on mathematical concepts and skills encountered and used in a technological society.

Topics include:

- Problem Analysis - Part I
- Analysis of Games and Numbers Part I
- Relations and Formulas
- Income and Debt
- Data Analysis and Interpretation
- Problem Analysis - Part II
- Analysis of Games and Numbers - Part II
- Measurement Technology
- Operating a Vehicle
- Personal Income Tax
- Probability

MATHEMATICS MA40SA - APPLIED MATH

This course is one of two curricula available for students planning to pursue post-secondary studies in mathematics and science. Students will continue their path of study from Math 30SA.

Topics include:

- Probability
- Variability and Statistical Analysis
- Matrix Modelling
- Vectors
- Applications of Periodic Functions
- Sequences
- Personal Finance
- Design and Measurement

MATHEMATICS - MA40SC - CONSUMER MATH

This course is intended for students whose post-secondary planning does not include a focus on mathematics and science-related fields. MA40SC is a one credit course comprising of two half credits, each emphasizing consumer applications, problem-solving, decision making, as well as number understanding and use. Students will continue their path of study from MA30SC.

Topics include:

- Problem Analysis - Part V
- Analysis of Games and Numbers - Part V
- Personal Finance
- Government Finances
- Statistics, Investigative Project
- Problem Analysis - Part VI
- Analysis of Games and Numbers - Part VI
- Investments, Income Tax
- Design and Measurement
- Career/Life Project
- Variations and Formulas
- Completing a Portfolio

MATHEMATICS - MA40SP - PRE CALCULUS

This course is primarily a high-level study of theoretical mathematics with an emphasis on problem solving and mental mathematics, supported by cumulative exercises and testing. Students are required to learn mathematical concepts through practice and regular homework. Many of the questions and problems on exercises, tests, and examinations can be expected to be different from those presented in class. Topics include:

- Circular Functions
- Transformations
- Exponents and Logarithms
- Permutations, Combinations Binomial Theorem
- Probability
- Conics
- Trigonometric Identities
- Geometric Sequences

MATHEMATICS

CL45S and AM45S CALCULUS & ADVANCED MATH

This is an introductory course that will cover higher level math topics from the first year university courses Calculus and Linear Algebra. Topics include: limits, derivatives, applications of derivatives, integrals, complex numbers, matrices, and vector geometry. This course is available to both English and French Immersion students. This course is ideal for any students who have enrolled in MA40SP(F) and who plan to enroll in university facilities such as Agriculture & Food Sciences, Arts (Economics), Engineering, Management, Pharmacy, Science (Mathematics, Actuary, Biochemistry, Chemistry, Computer Science, Ecology, Zoology, Statistics) etc. Exemptions for the final exam may be granted according to the school's exemption policy. Students who enroll in the course will earn two provincial half credits – 0.5 for Calculus and 0.5 for Advanced Math.