# MATHEMATICS QUALIFYING (MATQ)

This is a list of the Mathematics Qualifying (MATQ) courses available at KPU.

#### Note:

These courses are not at the post-secondary level and therefore are not eligible for Education Tax Credit or Tuition Tax Credit (T2202A).

These courses meet the criteria of Adult Basic Education, and are therefore tuition-free for domestic students (Canadian citizens and permanent residents). Regular student fees and student association fees apply.

#### MATQ 0001 CR-.5 (formerly ABEM 0001) Adult Literacy Fundamental Mathematics Level 1

Students will learn beginning math concepts including addition and subtraction without carrying or borrowing, rounding whole numbers, ordering whole numbers to 100, counting by 2's, 5's, 10's up to 100, estimating time, applying addition and subtraction in real life situations, identifying geometric figures, recognizing time concepts (i.e., a.m./p.m., hours, min, sec.).

Prerequisites: ACP Math Assessment Not Transferable

# MATQ 0002 CR-.5 (formerly ABEM 0002)

Adult Literacy Fundamental Mathematics Level 2 Students will learn addition and subtraction with carrying and borrowing, round whole numbers, order numbers using greater than, less than, and equal. Students will learn multiplication of a single digit by multiple digits, making change, telling time, adding time, and solving problems using perimeter of squares and rectangles.

Prerequisites: MATQ 0001 or ABEM 0001 or ACP Math Assessment Not Transferable

#### MATQ 0003 CR-.5 (formerly ABEM 0003) Adult Literacy Fundamental Mathematics Level 3

Students will learn the divisibility rules for 2, 3, 5, and 10. Students will learn to multiply and divide larger numbers. Students will learn to add and subtract time and learn to make change. Students will find areas and perimeters of squares and rectangles.

Prerequisites: MATQ 0002 or ABEM 0002 or ACP Math Assessment Not Transferable

# MATQ 0004 CR-.5 (formerly ABEM 0004)

Adult Literacy Fundamental Mathematics Level 4 Students will learn to add, subtract, multiply, and divide decimals. Students will apply decimal calculations to various problems including area, perimeter, metric measurement, record keeping, and unit pricing.

Prerequisites: MATQ 0003 or ABEM 0003 or ACP Math Assessment Not Transferable

#### MATQ 0005 CR-.5 (formerly ABEM 0005) Adult Literacy Fundamental Mathematics Level 5

Students will learn to add, subtract, multiply, and divide fractions and mixed numbers. Students will also convert between fractions and decimals.

Prerequisites: MATQ 0004 or ABEM 0004 or ACP Math Assessment Not Transferable

# MATQ 0006 CR-.5 (formerly ABEM 0006)

Adult Literacy Fundamental Mathematics Level 6 Students will learn ratio, rate, proportion, percentage, and descriptive statistics.

Prerequisites: MATQ 0005 or ABEM 0005 or ACP Math Assessment Not Transferable

## MATQ 0010 CR-3 (formerly ABEM 0010) Intermediate Mathematics (Math 10)

Students will briefly review fundamental arithmetic and descriptive statistics. They will focus on a study of algebra, word problems, graphs, measurement, geometry and right-triangle trigonometry, with an introduction to logic and sets. Students will upgrade their mathematics skills and understanding in preparation for an applied or academic program.

Prerequisites: MATQ 0008 or ABEM 0008 or MATQ 0009 or ABEM 0009 or MATP 1009 or MATQ 1091 or ACP Assessment or Mathematics Placement Test Not Transferable

## MATQ 0011 CR-3 (formerly ABEM 0011) Advanced Mathematics (Math 11)

Students will learn algebra and trigonometry, with an emphasis on problem-solving. They will be introduced to functions, systems of equations, quadratic and exponential functions, inequalities, radical expressions, complex numbers, and the sine and cosine laws.

Prerequisites: MATQ 0010 or ABEM 0010 or MATP 1010 or MATQ 1092 or ACP Assessment or Mathematics Placement Test. Transferable (refer to transfer guide)

#### MATQ 0027 CR-0 (formerly ABEM 0027) Directed Study: Math

Students will work on a variety of units taken from other ABE math courses at the Intermediate or Advanced level. The student and instructor will draw up a list of units appropriate to the student's needs.

Prerequisites: ACP Assessment Not Transferable

#### MATQ 1071 CR-.5 (formerly MATQ 0001) Adult Literacy Fundamental Mathematics Level 1

Students will learn beginning math concepts including addition and subtraction without carrying or borrowing, rounding whole numbers, ordering whole numbers to 100, counting by 2's, 5's, 10's up to 100, estimating time, applying addition and subtraction in real life situations, identifying geometric figures, recognizing time concepts (i.e., a.m./p.m., hours, min, sec.).

Prerequisites: ACP Math Assessment

#### MATQ 1072 CR-.5 (formerly MATQ 0002) Adult Literacy Fundamental Mathematics Level 2

Students will learn addition and subtraction with carrying and borrowing, round whole numbers, order numbers using greater than, less than, and equal. Students will learn multiplication of a single digit by multiple digits, making change, telling time, adding time, and solving problems using perimeter of squares and rectangles.

Prerequisites: MATQ 1071 or MATQ 0001 or ABEM 0001 or ACP Math Assessment

#### MATQ 1073 CR-.5 (formerly MATQ 0003) Adult Literacy Fundamental Mathematics Level 3

Students will learn the divisibility rules for 2, 3, 5, and 10. Students will learn to multiply and divide larger numbers. Students will learn to add and subtract time and learn to make change. Students will find areas and perimeters of squares and rectangles.

Prerequisites: MATQ 1072 or MATQ 0002 or ABEM 0002 or ACP Math Assessment

#### MATQ 1074 CR-.5 (formerly MATQ 0004) Adult Literacy Fundamental Mathematics Level 4

Students will learn to add, subtract, multiply, and divide decimals. Students will apply decimal calculations to various problems including area, perimeter, metric measurement, record keeping, and unit pricing.

Prerequisites: MATQ 1073 or MATQ 0003 or ABEM 0003 or ACP Math Assessment

## MATQ 1075 CR-.5 (formerly MATQ 0005) Adult Literacy Fundamental Mathematics Level 5

Students will learn to add, subtract, multiply, and divide fractions and mixed numbers. Students will also convert between fractions and decimals.

Prerequisites: MATQ 1074 or MATQ 0004 or ABEM 0004 or ACP Math Assessment

# MATQ 1076 CR-.5 (formerly MATQ 0006)

Adult Literacy Fundamental Mathematics Level 6 Students will learn ratio, rate, proportion, percentage, and descriptive statistics.

Prerequisites: MATQ 1075 or MATQ 0005 or ABEM 0005 or ACP Math Assessment

# MATQ 1079 CR-3 (formerly MATQ 1091) Basic Mathematics

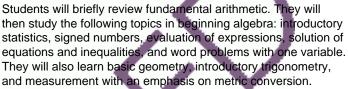
Students will briefly review fundamental arithmetic. They will then study the following topics in beginning algebra: introductory statistics, signed numbers, evaluation of expressions, solution of equations and inequalities, and word problems with one variable. Students will also learn basic geometry, introductory trigonometry, and measurement with an emphasis on metric conversion.

#### MATQ 1089 CR-3 Intermediate Algebraic Math

Students will study operations with rational numbers, ratio, proportion, percent, powers, roots, scientific notation, measurement, geometry, and trigonometry. They will also perform operations on, factor, and evaluate algebraic expressions as well as solve and graph equations.

Prerequisites: Apprenticeship and Workplace Mathematics 10 (B), or Foundations and Pre-Calculus Math 10 (C), or Apprenticeship and Workplace Mathematics 11 (C+), or Foundations of Math 11 (C-), or Pre-Calculus Math 11 (C-), or MATQ 1076 (MASTERY), or MATQ 1079 (C+), or MATQ 1094, or ACP Assessment with a result of "MATQ 1089", or Mathematics Placement Test with a result of "MATQ 1089"

# MATQ 1091 CR-3 Basic Mathematics



# MATQ 1092 CR-3 (formerly MATP 1010) Introductory Algebra

Students will briefly review fundamental arithmetic and descriptive statistics. They will focus on a study of algebra, word problems, graphs, measurement, geometry and right-triangle trigonometry, with an introduction to logic and sets. Students will upgrade their mathematics skills and understanding in preparation for an applied or academic program.

Prerequisites: Principles of Math 10 (C) or Pre-calculus Math 10 (C) or Foundations of Math 10 (C) or Applications or Principles of Mathematics 11 (P) or ABEM 0009 or MATP 1009 or MATQ 1091 or ABEM 0008 or MATQ 0006 or ACP Assessment or Mathematics Placement Test. Not Transferable

#### MATQ 1093 CR-3 Intermediate Algebra

Students will study algebraic concepts and methods, making use of them in problem solving. They will study polynomial, exponential, logarithm and trigonometric functions.

Prerequisites: MATQ 1092 or ABEM 0010 or Pre-calculus 12 with a P; or Principles of Mathematics 12 with a P; or Precalculus 11 with a C; or Principles of Mathematics 11 with a C; or Applications of Mathematics 12 with a C; or Foundations of Math 11 with a C+; or Mathematics Placement Test Not Transferable

## MATQ 1094 CR-3 Foundations of Mathematics

Students will study financial math, measurement, algebra, geometry, probability, statistics, logical reasoning, and trigonometry.

Note: This course can be taken in either a classroom related instruction environment (fixed intake) or an individually-paced learning environment (continuous intake).

Prerequisites: Apprenticeship and Workplace Mathematics 10 (A), or Foundations of Math and Pre-calculus 10 (B), Apprenticeship and Workplace Mathematics 11 (B+), Foundations of Math 11 (C), or Pre-Calculus Math 11 (C-), or MATQ 1079 (A), or MATQ 1091 (A), or MATQ 1089 (C), or an ACP Math assessment result of "MATQ 1094", or Math Placement Test result of "MATQ 1094" Not Transferable

# MATQ 1099 CR-3 (formerly MATP 1011) Qualifying Studies Math

Students will review real numbers, operations with rational numbers, polynomials, solving and graphing linear equations and inequalities. They will also study quadratic, radical and rational expressions, equations, and functions as well as systems of linear equations and inequalities. Note: Students preparing for programs in the sciences, engineering, and other related fields may use this as a qualifying course.

Prerequisites: Foundations of Math & Pre-calculus 10 (B+), or Foundations of Math 11 (C+), or Pre-Calculus Math 11 (C), or MATQ 1089 (C+), or MATQ 1094, or ACP Assessment with a result of "MATQ 1099", or Mathematics Placement Test with a result of "MATQ 1099". Not Transferable