

8580 16th Ave, Burnaby, BC, V3N 1S6

<http://online.sd41.bc.ca>

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Information online.info@sd41.bc.ca
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Course: Foundations of Mathematics and
Pre-calculus 10

Course 10 months
Length: (approx 120 hours)

Teacher: Francis Tsen

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Course Description: This pathway is designed to provide students with the mathematical understandings and critical-thinking skills identified for post-secondary studies in programs that do not require the study of theoretical calculus

Resources: A textbook required is not required for this course.

How will your mark be calculated?

Learning Guides	10%
Review Quizzes	10%
Unit Exams	30%
Midterms	50%

Curriculum

The BC Ministry of Education Foundations of Mathematics 10 and Precalculus consists of 5 Big Ideas

- Proportional Comparisons can be made among right triangles, using trigonometry
- The meaning of each operation, including powers, extends to algebraic expressions.
- Rate of change is an essential attribute of linear relations, and has meaning in the different representations, including equations.
- Operations between polynomial expressions are connected and allowed us to make meaning through abstract thinking.
- Analyzing simulations and data allows us to notice trends and relationships.

Students are expected to know the following:

- operations on **powers** with integral exponents
- **relationships** among data, graphs, and situations
- **linear relations**, including slope and equations of lines
- solving **systems** of linear equations
- **multiplication** of polynomial expressions
- polynomial **factoring**
- primary trigonometric ratios
- **experimental probability**
- **financial literacy**: gross and net pay

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Foundations of Mathematics 10 and Precalculus at Burnaby Online is organized as shown in this table

Completion of items in boldface and underlined will activate a student in this course.

Units	Formative Assessment	Learning standards
<u>1: Exponents</u>	<u>1 assignments</u> <u>4 Review quizzes</u> <u>1 Unit Exam</u>	operations on powers with integral exponents
2: Relations and Functions	1 assignment 5 Review Quizzes 1 Unit Exam	relationships among data, graphs, and situations
3: Linear Relations	1 assignment 5 Review Quizzes 1 Unit Exam	linear relations , including slope and equations of lines
4: Linear Systems	1 assignment 3 Review Quizzes 1 Unit Exam	solving systems of linear equations
Module 1 Exam Covering Units 1-4		
5: Polynomials	1 assignment 2 Review Quizzes 1 Unit Exam 1 Midterm Review assignment	multiplication of polynomial expressions
6 Factoring	1 assignment 4 Review Quizzes 1 Unit Exam	polynomial factoring
7: Trigonometry	1 assignment 4 Review Quizzes 1 Unit Exam	primary trigonometric ratios
8: Probability	No Longer Part of the curriculum effective Dec 2017	
9: Financial Literacy	1 assignment 3 Review Quizzes 1 Unit Exam 1 Midterm Review assignment	financial literacy : gross and net pay
Module 2 Exam Covering Units 5,6,7,9		

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Students are expected to:

- contact the teacher by instant messaging, email or phone when help is needed or questions arise
- be actively engaged and submitting work on a regular basis
- inform the teacher when they will be inactive for two or more weeks.
- be aware that if they are inactive in a course for four or more weeks they may be removed from that course
- check their email at least twice a week
- create and submit completed solutions for all activities in the unit/chapter before requesting a test.
- cite all sources properly
- answer in their own words
- check that their work and tests have been marked.
- make time available to come in to Burnaby Online to write tests.
- make appointments to write tests at least 2 school days in advance.