New Westminster Online Learning School

Course Title and Grade: Pre-Calculus 11
Prerequisite: Math Foundations and Pre-Calculus 10

Course Description

In Math Pre-Calculus 11, students focus on functions that help with mathematical understanding in future calculus courses. There is a component of real-world applications that help students with problem-solving skills. This course covers topics in the following areas: fundamentals of finance, factoring and exponents, rational expressions, inequalities, and trigonometry. The online version of this course affords students the ability to work independently at the pace that best suits them while requiring careful time management and developing communication and thinking skills.

Enduring Understanding/Big Ideas (from: BC Pre-Calculus 11 Curiculum)

- Algebra allows us to generalize relationships through abstract thinking.
- The meanings of, and connections between, operations extend to powers, radicals, and polynomials.
- Quadratic relationships are prevalent in the world around us.
- Trigonometry involves using proportional reasoning to solve indirect measurement problems.

Specific Learning Outcomes

- Reasoning and modelling
- Understanding and solving
- Communicating and representing
- Connecting and reflecting

A detailed list of Curricular Competencies and Content Elaborations are available here: https://curriculum.gov.bc.ca/curriculum/mathematics/11/pre-calculus

Course Content

Module 1	Financial Literacy
Module 2	Exponents & Radicals
Module 3	Factoring Polynomials
Module 4	Quadratic Functions
	Midterm (to be completed in-person before proceeding)
Module 5	Rational Expressions
Module 6	Inequalities

Module 7	Trigonometry
	Final Exam

Evaluation

Learning Activity	Percentage of Final Mark
Quizzes	15%
Projects	10%
Unit Tests	25%
Midterm Exam	25%
Final Exam	25%
Total	100%

Student Learning Activities and Strategies

Unless otherwise specified, learning guides, quizzes, unit tests, and projects may be completed online from home through the course platform. Midterm and final exams may **only be completed in-person**.

*Important: Learning guides are your primary source of notes in this course. Complete each package as you work through the material in the lessons. Check the key, make your corrections, and reach out to your instructor for assistance as needed.

Exams & Assessment

Both the midterm and final exams must be written **in-person** at the Online Learning Centre located in New Westminster Secondary School. **External invigilation is not permitted.** In exceptional cases, alternate exam arrangements may be considered case-by-case, but they must be formally requested and approved prior to time-sensitive deadlines.

*Important: At least 50% of the course, including the midterm exam, must be completed before a grade can be reported on your transcript.

Prepare for your in-person assessments by reviewing the permissible and restricted materials during exams. These are **the same expectations** for closed-book unit tests. While it is not required, it is highly recommended that you take at least your first unit test in-person to avoid surprises for the midterm and final assessments. Should a discrepancy arise between assessments completed in-person and remotely, you may be required to complete further assessments in-person.

Course Expectations

1. Look through the course and create a personal completion timeline.

- Plan a tentative schedule and write out target dates for completing each unit using the Pacing and Progress tool.

- Schedule your midterm & final exam dates.
- Ask questions during instructor office hours to maintain momentum and progress. Consistent effort is key to staying on track.

2. **Use and complete the Learning Guides in each module.**
    - You are encouraged to print out and complete the Learning Guides. These are helpful to self-assess progress, and to identify any areas where help is needed.
    - Learning Guides are not for marks, but they are your main tool for taking notes and practicing. The guide also provides examples of what to expect from the graded tasks.
    - Work through each lesson and complete all the questions in the guide as you go.
3. **Take quizzes before unit tests.**
    - Only take the unit test once you have:
        i. Completed and reviewed all prior quizzes.
        ii. Completed the learning guide, and the answers have been checked using the answer key.
4. **Ask questions when you need help.**
    - Use Course Mail to contact your teacher.
    - If you're stuck or unsure about a concept, reach out early. Don't wait!

Resources

There is NO textbook required for this course. All materials are provided online.