



I. Key Message/Expectations

Grimshaw Public School strives for academic excellence and adheres to its goals, one of which is that all students are numerate.

In order to be successful, students must be attending classes regularly and must be completing the work associated with learning concepts and skills of the course. Remember, math is cumulative, and concepts build on one another therefore understanding foundational concepts is the building block for success.

All students are expected to come to class on time and prepared with the materials required for class.

The students are expected to listen attentively to instruction and be sure to ask questions to clarify concepts. Students' productive engagement is an integral part of achieving success in this course.

Continuous practice and reinforcement of skills are important, therefore class time will be given frequently to work on assignments. It is expected that students will stay on their task during these times. All assignments are due either at the end of the class period or at the beginning of next class.

Students are expected to demonstrate appropriate behavior in accordance with PRSD Board Policies and Administrative Procedures. Positive and considerate behavior is expected in class. Therefore, respect for teachers, for support staff and for other students is essential.

Should students miss a day due to an excused or planned absence, students are expected to inform the teacher as soon as possible for materials to be provided. If unplanned, please inform the teacher either by email or when back in school.

II. Course Overview

The Mathematics Grades 10–12 Program of Studies has been derived from The Common Curriculum Framework for Grades 10–12 Mathematics: Western and Northern Canadian Protocol, January 2008 (the Common Curriculum Framework). The program of studies incorporates the conceptual framework for Grades 10–12 Mathematics and most of the general outcomes and specific outcomes that were established in the Common Curriculum Framework.

In this program of studies, students use numerical and logical reasoning to solve puzzles, and solve real-life problems about the probability of events occurring. They solve problems algebraically involving rational equations; investigate exponential, logarithmic, polynomial and sinusoidal functions; and research and present a mathematical topic of their choice.

III. Scope and Sequence

As per Alberta Education Mathematics 20-3 Program of Studies, four strands will be addressed in the course. The following chart provides an outline of when these strands will be addressed:

Strands	Chapters	Tentative dates
Logical Reasoning	Set Theory	September 6 to 15, 2023
	Logic	September 18 to 21, 2023
Probability	Counting Methods	September 25 to October 6, 2023
	Probability	October 9 to 20, 2023
Relation and Functions	Exponential Functions	October 23 to November 3, 2023
	Logarithmic Functions	November 6 to 17, 2023
	Polynomial Functions	November 20 to December 1, 2023
	Sinusoidal Functions	December 4 to 15, 2024
	Rational Expressions and Equations	December 18 to January 12, 2024
Research Project	3 class periods	

Note: The above dates are a rough estimate of the timeline. It may change depending on the needs of the class. Time permitting, there will be days built into schedule for final exam review.

IV. Teaching Methodology

At the beginning of the class, students are expected to put their phones in the bin. The purpose of this is to help students focus on the lesson and avoid any distractions their phones may cause.

Students will begin daily with “bell work” that may include review of prior lessons, a Math trivia question or a puzzle. This allows students to remember what they have learned and allows the teacher to assess the need to review the previous lesson or to move forward to the next one.

Students will be taught through a variety of different instructional methods such as direct teaching, cooperative learning, independent learning as well as group discovery learning.

Smartboard, chromebooks and other technology will be used when and where appropriate.

Students will have the opportunity in class to engage in practice exercises of the material taught each day. Should the assignment not be completed in class, the expectation is that they are to be completed for homework and be submitted the next school day.

Regular updates will be posted in the google classroom. Reminders for upcoming quizzes or tests will be posted on the white board in class weekly, and will be posted in the google classroom.

V. Assessment

Each unit consists of various learning outcomes set by Alberta Education. Therefore, a variety of formative and summative assessment strategies will be used throughout this course.

Achievement of these indicators will be used to determine whether students have met the corresponding specific outcomes.

Assignments: Assignments are given at the end of each lesson that is to be completed in class or may be given as homework. In the event a student does not hand-in an assignment, a NHI (not handed in) will be assigned on PowerSchool until it is and parents/guardians will be notified.

Quizzes: Quizzes will be given as a formative assessment. This will gauge students’ understanding of sections of each unit. This is a great opportunity for students to identify gaps in knowledge, to retain information and to improve how they will learn.

Tests: Tests are given at the completion of each chapter or unit. These standardized tests will evaluate students’ learning of the content area.

Course Evaluation		
Coursework 95%	Logical Reasoning <ul style="list-style-type: none"> ● Set Theory ● Logic 	6% 6%
	Probability <ul style="list-style-type: none"> ● Counting Methods ● Probability 	14% 14%
	Relations and Functions <ul style="list-style-type: none"> ● Exponential Functions ● Logarithmic Functions ● Polynomial Functions ● Sinusoidal Functions ● Rational Expressions & Equations 	11% 11% 11% 11% 11%
Research Project		5%

Students should expect to be assessed for marks through the use of summative unit tests. Assessment is based around the students' most recent demonstration of the course material. Opportunities for rewrites will be available.

Students and parents are encouraged to use the school website and PowerSchool to keep informed of marks, attendance, etc. This site will be updated regularly to give an accurate representation of each student's achievement to date.

VI. Resources/Materials

The textbook for the course is from Foundations of Mathematics Workbook.

A student-owned graphing calculator is required, preferably one of the following Texas Instrument Graphing Calculator: TI-83, TI-83 Plus, TI-84, TI-84 Plus

All class notes and assignments can be accessed in the Google Classroom.