



McCreary School  
 Semester 1 – 2023/2024  
 Mrs. Lockhart

**Grade 11  
 Applied  
 Math**

**COURSE DETAILS**

Course Code: 3903  
 Course Name: Applied Math 30S  
 Credit Value: 1.0  
 Prerequisite: Intro to Applied &  
 Pre-Calculus Math 20S

Welcome to

# APPLIED

**CONTACT INFORMATION**

Room 14 McCreary School  
 MS Teams: Grade 11 Applied  
 Email: jlockhart@trsd.ca  
 School phone: 835-2083

**COURSE TECHNOLOGY**

Office 365  
 MS Teams: Grade 11 Applied  
 Desmos  
 Ti-83 Graphing Calculator

**COURSE TEXTBOOK**

Foundations of Mathematics 11.  
 Nelson. 2011

**SUPPLIES**

- 2" – 3 ring binder
- Loose leaf
- Graph paper
- Scientific calculator
- Ruler
- Pens
- Pencils
- Erasers
- Highlighters

Timeline	Unit & Topic	
September	<b>1. Inductive and Deductive Reasoning</b>	
	Analyze conjectures	
	Derive proofs	
	<b>2. Properties of Angles and Triangles</b>	
	Parallel lines	
October	Angles properties in triangles and polygons	
	<b>3. Acute Triangle Trigonometry</b>	
	Sine law	
	Cosine law	
	<b>4. Oblique Triangle Trigonometry</b>	
November	Sine and cosine laws	
	Ambiguous triangles	
	<b>5. Statistical Reasoning</b>	
	Standard deviation and z-scores	
	Normal distribution	
December	Confidence intervals	
	<b>6. Systems of Linear Inequalities</b>	
	Graph and solve a linear system of inequalities	
	Solve optimization problems	
	<b>7. Quadratic Functions and Equations</b>	
January	Properties of quadratic equations	
	Solve quadratic equations	
	<b>Christmas Break</b>	
	<b>8. Proportional Reasoning</b>	
	Interpret and apply rates	
January	Scale diagrams	
	Scale factors in 2D and 3D objects	
	<b>Exam Review</b>	
	<b>Final Exam</b>	

## UNIFYING CONCEPTS & GENERAL OUTCOMES

Grade 11 Applied Mathematics is intended for students considering post-secondary studies who do not require a study of theoretical calculus. It is context-driven and promotes the learning of numerical and geometrical problem-solving techniques as they relate to the world around us. It builds upon the foundation of knowledge and skills from Grade 10 Introduction to Applied and Pre-Calculus Mathematics and builds a foundation for Grade 12 Applied Mathematics.

Primary goals of Applied Mathematics are to have students develop critical-thinking skills through problem solving and model real-world situations mathematically to make predictions.

## RULES & EXPECTATIONS

### ➤ Daily Classroom Expectations

Show up to class on time, with all your supplies, and use class time effectively. Take responsibility for your learning by completing all assigned work and being proactive rather than reactive.

### ➤ Technology in the Classroom

Technology will be an integral part of the functionality of the classroom. Students will have access to the school laptops, but are also welcome to bring their own device. Improper use may result in a loss of certain privileges.

### ➤ Student Lates & Absences

Students who are late for class are asked to come in quietly without causing a disruption. Students who make a habit out of being late may not be allowed into the room if class has already begun.

If you are absent, YOU are responsible for finding out what you missed and making up all missed work. If you have an excused absence for the day of a test, please make arrangements to write it the day you return to school. If you skip a test or quiz you will receive a zero.

### ➤ Academic Dishonesty

Academic dishonesty including (but not limited to) inappropriate collaboration, cheating, or plagiarism is a severe offence and will be dealt with according to the policy outlined in the school handbook.

### ➤ Extra help

Arrangements can be made for in person extra help before or after school or during lunch hour. Students can also ask for clarification or feedback via email, MS Teams chat or discussion post, or schedule a Teams meeting.

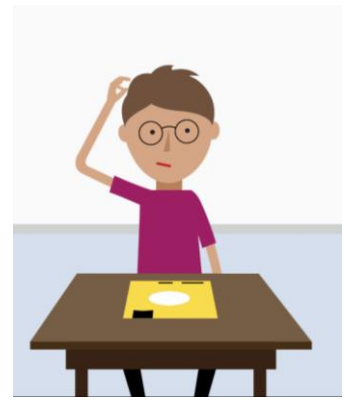
NEED HELP?



## ASSESSMENT

### ➤ Homework

You won't have homework every night, but when it is assigned it is expected to be completed on time. Being a split class means we need to maximize our time together. In order to get the greatest benefit from scheduled direct instruction, students need to be prepared, which means having assigned work completed.



### ➤ Textbook Assignments

It is expected that all students use class time wisely and complete all assignments on time. A lot of the work students complete will not be graded, but that does not mean that it's not important. These practice opportunities are meant to help both the student and the teacher assess whether or not the student has developed an appropriate level of understanding prior to being given a summative assessment which will contribute to the final grade.

### ➤ Outcome Assessments

Students will be given 8 outcome assessments throughout the course. These assessments are open book and students will be given some class time to complete each, but they may also be completed at home. Each assessment is to be completed BEFORE the corresponding chapter test.

### ➤ Incomplete and Late Work

Work is to be completed on time and to the best of the student's ability. Late or missing assignments will be penalized as outlined in the school student handbook, "Upon teacher discretion a maximum of 5% may be deducted for every day the assignment is not turned in. If the assignment is not turned in after two weeks or at the start of a new unit, the assignment will receive a mark of zero."

### ➤ Chapter Tests

There will be 8 chapter tests throughout the semester. Students are allowed a personalized study sheet for each chapter test. The study sheet is to be a maximum of one side of a HALF of 8.5" x 11" paper.

### ➤ Test Re-writes

A student may request a test re-write for one of the 8 chapter tests. In order for a student to be eligible for a re-write they are required to complete the "Request to Retest" form. If a re-write is done, the new mark replaces the old mark (for better or worse).

### ➤ Optional Video Tutorial

In addition to the one re-test, students have the option to improve one test score with a video tutorial project. The student will work with Mrs. Lockhart to create a video lesson that explains the rules/strategies involved in a concept as well as key examples. The original test score and the tutorial project score will be averaged to calculate the new mark.

### ➤ Final Exam

All students will be required to write the final exam during exam week; January 30<sup>th</sup> – February 2<sup>nd</sup>. The final exam is worth 30% of the student's overall grade. Students are expected to create their own one-page, double-sided 8.5"x11" study sheet for the exam.

Assessment Category	Assessment Item	Item Weight	Category Weight
<b>Outcome Assessments</b>	Ch 1: Inductive and Deductive Reasoning Ch 2: Triangle Proofs & Properties Ch 3: Cosine and Sine Law for Acute Triangles Ch 4: Cosine and Sine Law for Obtuse Triangles Ch 5: Statistical Reasoning Ch 6: Systems of Inequalities Ch 7: Quadratic Equations Ch 8: Rates and Scale Factors	12.5% 12.5% 12.5% 12.5% 12.5% 12.5% 12.5% 12.5%	25%
<b>Chapter Tests</b>	Ch 1: Inductive and Deductive Reasoning Ch 2: Properties of Angles and Triangles Ch 3: Acute Triangle Trigonometry Ch 4: Oblique Triangle Trigonometry Ch 5: Statistical Reasoning Ch 6: Systems of Linear Inequalities Ch 7: Quadratic Functions and Equations Ch 8: Proportional Reasoning	12.5% 12.5% 12.5% 12.5% 12.5% 12.5% 12.5% 12.5%	45%
<b>Final Exam</b>	The final exam will take place in January. The details of the exam will be decided at a later date.	100%	30%

### Behaviour Assessment

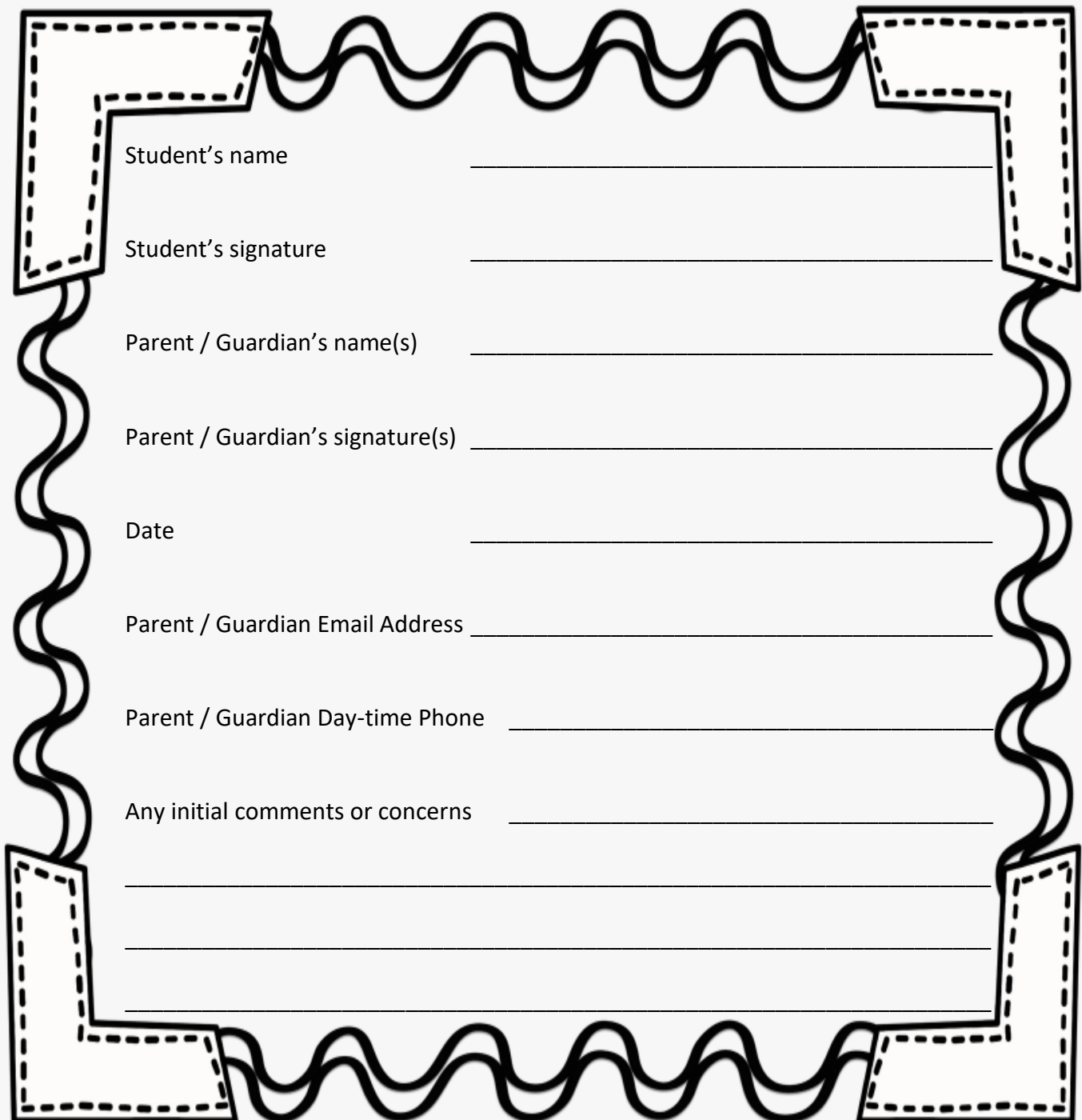
- **Personal Management Skills** - The student self-monitors own behaviors and personal growth, organizes for learning, contributes positively to the learning process and takes responsibility for work completion.
- **Active Participation in Learning** - The student participates actively in learning, is curious, sets learning goals, self-assesses, provides feedback, and uses feedback for improvement.
- **Social Responsibility** - The student demonstrates citizenship and social skills that contribute to making the classroom, school, and larger community a positive, safe and caring environment.



## Applied Math 30S - A Letter to Parents

Students are encouraged to speak to me directly as soon as any questions, concerns or problems arise. Parents are also encouraged to call or email anytime you'd like to express concern or request information regarding your child's progress in the course. On that note, there may be times when I have a concern that I would like to address prior to the next report card or progress report and email is the easiest way for me to do this. If possible, please provide me with your email address below. If you do not have an email, please provide a phone number that could be used to reach you during the day. I'm looking forward to a great year.

Mrs. Lockhart



Student's name \_\_\_\_\_

Student's signature \_\_\_\_\_

Parent / Guardian's name(s) \_\_\_\_\_

Parent / Guardian's signature(s) \_\_\_\_\_

Date \_\_\_\_\_

Parent / Guardian Email Address \_\_\_\_\_

Parent / Guardian Day-time Phone \_\_\_\_\_

Any initial comments or concerns \_\_\_\_\_

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