

McCreary School 2025/2026

Applied Math 30S

Miss. Kohlman - <u>mkohlman@trsd.ca</u> School Phone: (204) 835-2083

COURSE INFORMATION

Course Code: 3903 Value Credit: 1.0 Duration: Semester 1 Classroom: Room 14

Prerequisites: Intro to Applied & Pre-

Calculus Math 20S

COURSE TEXTBOOK

Foundations of Mathematics 11. Nelson. 2011.

COURSE TECHNOLOGY

Office 365

MS Teams: Grade 11 Applied

Desmos

Ti-83 Graphing Calculator

SUPPLIES

- 3-Ring Binder
- Pencils, Erasers, & Pens
- 1 Geometry Set
- 1 Scientific Calculator
- 200 Page Coiled Notebook
- 0.5cm Graph Paper
- Ruler
- Highlighters

YEAR PLAN SUMMARY

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

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.

ACADEMIC ASSESSMENT

Assessment	Assessment Item	Item	Category
Category		Weight	Weight
Outcome Assessments	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%
Chapter Tests	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%	45%
Final Exam	The final exam will take place in January. The details of the exam will be decided at a later date.	100%	30%
Total			100%

BEHAVIOURAL ASSESSMENT

Students will receive a letter grade on their report cards for the following:

- Personal Management: Uses class time effectively; works independently; completes homework and assignments on time.
- Active Participation in Learning: Participates in class activities; sets learning goals.
- *Social Responsibility*: Works well with others; resolves conflicts appropriately; respects self, others and environment; contributes in a positive way.

ASSESSMENT GUIDELINES

<u>Homework:</u> 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.

<u>Textbook Assignments:</u> 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.

<u>Outcome Assessments:</u> 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.

<u>Chapter Tests:</u> 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.

<u>Final Exam:</u> All students will be required to write the final exam during exam week; January 26th – January 30th. 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.

RULES AND EXPECTATIONS

<u>Daily Classroom Expectations:</u> 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.

<u>Absent:</u> If you are absent, please connect with me to find out what you missed. YOU are responsible for 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.

<u>Extra Help:</u> Extra help will always be available when you need it. I am generally available before and after school, as well as at lunch hour. Please make arrangements with me if this is something you are needing.

<u>Technology in the Classroom:</u> Students are encouraged to bring their school provided laptop with them to school every day. Cell phones will not be permitted during class time. Improper use of technology may result in a loss of certain privileges.

<u>Academic Dishonesty:</u> Academic dishonesty, including, but not limited to inappropriate collaboration, plagiarism, and cheating is a severe offence and will be dealt with according to the policy outlined in the school handbook.

<u>Late Policy:</u> 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."