

**Course Name:** Grade 12 Applied Math (40S)

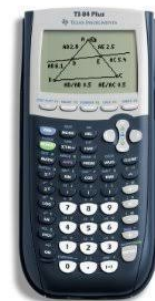
**Teacher:** Ryan Maksymchuk

**Contact Information:**

Phone: 204-734-4511, ext. 2204

Email: [rmaksymchuk@svsd.ca](mailto:rmaksymchuk@svsd.ca)

Cell: available on request, for student use



**Course Description:** As the final course in the Applied Math family of courses, students are expected to be familiar with and use various problem-solving techniques to solve complex problems. Technology is certainly encouraged, and students will have access to and be expected to use various apps and software titles on a variety of platforms. The focus will be on problem-solving, but not necessarily from a 'pencil and paper' perspective.

Framework Reference (Government of Manitoba Web Document)

[http://www.edu.gov.mb.ca/k12/cur/math/framework\\_9-12/grade12\\_applied.pdf](http://www.edu.gov.mb.ca/k12/cur/math/framework_9-12/grade12_applied.pdf)

\*It should be noted that for in-class assessments as well as the final exam, students in Applied Math in Manitoba will be allowed to create a student-prepared 'study sheet' to assist them.

**Textbook:** "Foundations of Mathematics 12"; Nelson Publishers, Canavan-McGrath et al, 2012, Nelson Education Ltd.

**Resources:** Many print and web-based resources will exist to inform students with respect to curriculum topics. Students are encouraged to attend class regularly to receive updated information as presented.

**Required Materials:** writing materials (including notebooks / looseleaf papers / binder storage), a graphing calculator or smart phone / tablet equivalent, graphing paper (strongly encouraged), ear-buds / headphones (strongly encouraged)

**Units of Study:**

Functions  
Probability (including Permutations and Combinations)  
Compound Interest / Investments  
Design & Measurement  
Set Theory & Logic  
Research Project

### Course Assessment Weighting / Details:

#### (All Summative Assessments)

10%	Rich Performance Tasks (assigned work, quizzes, etc.)
10%	Research Project
60%	Tests**
20%	Provincial Achievement Test (mandatory, provincially-administered)

ALL assigned work is due and expected. No course credit will be granted unless all assessments / required items are submitted. "Taking a zero" is an unacceptable option. Having said that, late assignments, while still expected, will receive a zero grade if they are submitted after a unit of study time has passed.

Students with an average score of <50% or a significant number of unaccounted for absences may be denied the opportunity to write the Provincial Test at the discretion of the instructor. Students who do not write the Provincial Achievement Test cannot receive course credit unless other arrangements are made with SVRSS administration.

\*\*students will be given the opportunity to re-do one (1) summative assessment over the course of the semester. Any student missing an important summative assessment like a test may be required to be assessed with an alternate and possibly more challenging assessment. (Rationale: student has created an advantage by having more time to prepare and/or discuss assessment items). Missing an assessment with parental permission, illness, field trip, court appearance, etc. may still warrant an alternate assessment as per the discretion of the instructor. Additional re-do opportunities only exist at the discretion of the instructor.

***Assessment Guidelines (formative/summative)*** - students will be evaluated formatively (for learning) on an ongoing basis by the instructor. These assessments will not count toward grades, and will not be recorded in PowerSchool. Grades in PowerSchool should be regarded as summative assessments (evaluating learning), and as such, will appear in PowerSchool.

***Learning Behaviours*** - students are encouraged to be present, both physically and mentally, and to try their best at all times. Interaction with lessons and question and answer conversations during class instruction are encouraged always. Students are always encouraged to develop personal learning responsibility by knowing when/where to use personal devices. Personal Management Skills, Active Participation in Learning and Social Responsibility are assessed during formal reporting times and are recorded on the report card.

### ***Final Examination:***

If a student's final exam mark is higher than their term mark, the final exam weighting will be considered at 100%. That is, if a student scores higher on the final exam than their term mark, the final exam score becomes their final course grade. This will NOT be considered in reverse (i.e. the final exam will hold a minimum respective weight as per the course outline).