**Alonsa School**                                                                                         **2025-2026**
# APPLIED MATHEMATICS 40S

**Science Room**                                                                   **Course Code**: 3903
**Teacher**: Mr. Reimer                                    **Contact Information**: mreimer@trsd.ca
**Semester One**                                                                **Credit Value**: 1 credit

**Textbooks:**
- Canavan-McGrath, C., Pruner, M., Shaw, C., & Trufyn, D., **Foundations of Mathematics 12,** Nelson Education Ltd, 2012.
- **Grade 12 Applied Mathematics (40S)**, A Course For Independent Study – Field Evaluation, Government of Manitoba, 2015.

Welcome to Applied Mathematics 40S!  Please read this outline carefully, sign it and hand it back to the teacher.

Required Materials: pencil, eraser, ruler, geometry set, TI-83 graphing calculator (no phone).

Course Description: Grade 12 Applied Mathematics (40S) is intended for students considering post-secondary studies that 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.

The primary goals of Applied Mathematics are to have students develop critical-thinking skills through problem solving and through modelling real-world situations mathematically to make predictions. They are encouraged to learn and demonstrate effective communication skills through a variety of media.

Technology is an integral part of both learning and assessment in Applied Mathematics. Graphing calculators, spreadsheets, or other computer software will be used by students for mathematical explorations, modelling, and problem solving.

Goals for Students:
- Solve problems
- Make connections between mathematics and its applications
- Appreciate and value mathematics
- Communicate and reason mathematically
- Become mathematically literate
- Make informed decisions as contributors to society

To help you obtain the skills and accomplish these goals mentioned, this course has been broken down into the following six units (proposed timeline included):

- **Unit 1:** Financial Mathematics (Sept.)
- **Unit 2:** Logical Reasoning (Sept. - Oct.)
- **Unit 3:** Probability (Oct.)
- **Unit 4:** Functions (Oct. – Nov.)
- **Unit 5:** Sinusoidal Functions (Nov.)
- **Unit 6:** Techniques of Counting (Nov. - Dec.)
- **Unit 7:** Design and Measurement (Dec.)
- **Unit 8:** Mathematics Research Project (Jan.)

Students may be asked to bring materials from home for projects and activities.

Mark Breakdown:

| | |
|---|---|
| Course Work | 80% |
| Final Assessment | 20% |

Class Attendance: It is important for students to attend this class on a regular basis as class discussions may appear on assessment pieces. Should a student have to miss class, he/she has the responsibility to find out from a classmate what was discussed in class and get himself/herself caught up with notes/questions/tests or quizzes.
Students who miss class will be able to find the day's lesson/assignment on Microsoft Teams.

Marked Assessments: Each unit of study will have formative assessments and at least one summative assessment. The formative assessments will help students demonstrate their knowledge and understanding on the variety of topics/outcomes taught in each unit. It is expected that assessments be completed by the assigned due date. Students who miss the summative assessment at the end of the unit will complete it on the day they return to school.

Incomplete and Late Work: Students are expected to complete their work on time and to the best of their ability. Late or incomplete assignments will be given a mark of zero. When the student has completed the assignment, the mark of zero will be changed. At the teacher's discretion, for every day an assignment is late, a maximum of 5% may be deducted. After two weeks or at the start of a new unit, if the assignment has still not been turned in, the student will receive a mark of zero.

Rewrites and Missed Assessments: Students who do poorly on an assessment may request to rewrite an alternative assessment. Students will have one week after the completion of a unit to request to rewrite an assessment. Students will be required to come in at lunch (12:05 – 1:00) for three lunch hours for extra help and practice before they will able to rewrite the assessment. Students are permitted to rewrite a total of **3** assessments throughout the semester.

Homework: Assignments not completed during regular scheduled class are considered to be homework. These formal assessments are due on the assigned due date.

Lunch Hour (12:05-1:00): Students may also come at lunch time (12:05-1:00), eat lunch, and get extra help on assignments or get caught up on work they have missed.

Zero Policy: All missed assessments will be given a mark of zero. When the student has completed the assessment that was missed, the mark of zero will be changed to the mark the student achieved on that assessment.

Academic Dishonesty: Academic dishonesty such as plagiarism, cheating, or copying work is a severe offence and will result in harsh penalties. First offence will be a choice of either a zero on the assessment or redo the assessment at lunch time. A letter will also be sent home to your parents/guardians at this time. Second offence will be an automatic zero, with a referral to administration, as well as a letter sent home to parents/guardians.

Students and Parents/Guardians: Please sign below to indicate that you have read and understand the course outline. If you have any questions or comments, please include them on the space below. If, at any time during the school year, you have questions or concerns, please call the school and leave a message. I will get back to you as soon as possible.

Sincerely,

Mr. Reimer

Student signature: _____

Parent/ Parent/Guardian Signature: _____