



Course Description/Rationale/Overview:

This course enables students to broaden their understanding of real-world applications of mathematics. Students will analyze data using statistical methods; solve problems involving applications of geometry and trigonometry; solve financial problems connected with annuities, budgets, and renting or owning accommodation; simplify expressions; and solve equations. Students will reason mathematically and communicate their thinking as they solve multi-step problems. This course prepares students for college programs in areas such as business, health sciences, and human services, and for certain skilled trades.

Class Requirements:

Materials/textbooks/equipment:

- Binder and note paper
- Pencil, eraser
- Calculator is must

Textbooks:

- Grade 11 addison westley
- Grade 12 addison westley

(a) Missed Tests and Late Assignments

Students are to be present for test dates. There must be a verified, valid reason when a test is missed. The teacher may provide an alternative opportunity for testing or record an "absent" for that test.

All summative assignments will have a clear *Due Date*. Assignments that are handed after the *Due Date* will be accepted and assessed by the teacher if submitted prior to the *Deadline*. The *Deadline* is defined as the class period in which that graded assignment is returned to the class, unless there are extenuating circumstances.

For the mid-term report, no mark will be recorded for a missed summative assignment.

Where a student has not submitted enough work for the teacher to determine the student's level of achievement the report card will indicate that the student's work is incomplete and no grade will be assigned.

At the semester end, where summative assessments are incomplete, a mark of zero may be assigned and used to calculate the student's final grade.

(0) Assessment Strategies:

- Give students feedback with formative instruction before final summative assessment.
- Address both what students learn and how well they learn.
- Accommodate students with special education needs, consistent with the student's IEP.
- Ensure each student is given clear directions for improvement.
- Include the use of samples that provide evidence of their achievement.
- Are communicated clearly to students and parents at the beginning of the course.
- Are fair to all students.

Achievement Categories

Knowledge/Understanding	
30%	
Thinking/Inquiry	15%
Communication	15%
Application	40%

Curriculum strands:

Personal Finance
 Geometry and Trigonometry
 Data Management
 Mathematical Models
 Expressions and Equations

Learning Skills:

- Works Independently
- Team work
- Organization
- Work Habits
- Initiative

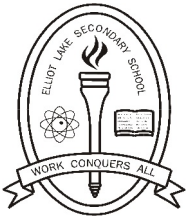
Evaluation:

The year's work will be based on the following assessment tools that will include one or more of the four Achievement Categories striving to meet the overall percentages established for each category:

- Quizzes
- Tests
- Assignments
- Projects
- Presentations
- Portfolios

FINAL MARK:

Term Work:	70%
Final Summative Evaluation:	
Final Exam	30%



COURSE OUTLINE

Unit of Study	Curriculum Strands	Category of Achievement	MAP4C Evaluation
Unit 1 - Mathematical Models	Compare and Contrast - exponential relations - linear relations	- evaluate powers - describe trends based on the interpretation	
Secondary			
Unit 2 - Personal Finance	quadratic relations - understand annuities and mortgages. - owning vs. renting - budgeting	on graphs - make connections involving formula and the type of relation; linear, exponential, or quadratic. - Calculate investments involving annuities. - Calculate investments involving mortgages. - Compare owning and renting an object. - Planning a budget	15 %
Unit 3 - Geometry and Trigonometry	-Solve problems involving measurement. - Solve problems involving acute and obtuse triangles	- metric to imperial conversions. - problems involving area and volume. - problems involving triangles including real life situations. - problems involving optimization of 2 and 3 dimensional objects.	15 %
Unit 4 - Data Management	- Solve problems involving One/Two variable stats	-Describe sampling techniques. -Calculate measures of central tendency ie. Mean, median, mode, range, and standard deviation. -Create and analyze scatter-plots	15 %
Unit 5 - Expressions and equations	- Solve/ simplify rational expression and equations.	- add, multiply, subtract, and divide rational expressions. - simplify linear equations.	10 %
Summative Evaluation	-Final Exam		30 %

Note: The above units may not be completed in order that the units are listed.