



CROCUS PLAINS REGIONAL SECONDARY SCHOOL COURSE OUTLINE AND ASSESSMENT GUIDE

Applied Mathematics 40S (MAD40S)

Teacher's Name(s): Mr. J. Slator

Contact Information: slator.jason@bsd.ca

Course Description: Grade 12 Applied Mathematics (40S) is a continuation of studies 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.

Text/Other Resources: Foundations of Mathematics 12 (Nelson)

Unit Title	Learning Outcomes <i>It is expected that students will:</i>	Proposed Time
Set Theory & Logic	12A.L.1. Analyze puzzles and games that involve numerical and logical reasoning, using problem-solving strategies. 12A.L.2. Solve problems that involve the application of set theory. 12A.L.3. Solve problems that involve conditional statements.	8 days
Counting Methods	12A.P.4. Solve problems that involve the fundamental counting principle. 12A.P.5. Solve problems that involve permutations. 12A.P.6. Solve problems that involve combinations.	10 days
Probability	12A.P.1. Interpret and assess the validity of odds and probability statements. 12A.P.2. Solve problems that involve the probability of mutually exclusive and non-mutually exclusive events. 12A.P.3. Solve problems that involve the probability of independent and dependent events.	12 days
Polynomial & Exponential Functions	12A.R.1. Represent data, using polynomial functions (of degree of 3, to solve problems. 12A.R.2. Represent data, using exponential and logarithmic functions, to solve problems.	10 days
Sinusoidal Functions	12A.R.3. Represent data, using sinusoidal functions, to solve problems.	8 days
Financial Mathematics	12A.FM.1. Solve problems that involve compound interest in financial decision making. 12A.FM.2. Analyze costs and benefits of renting, leasing and buying. 12A.FM.3. Analyze an investment portfolio in terms of: - interest rate - rate of return - total return.	12 days
Design & Measurement	12A.D.1. Analyze objects, shapes and processes to solve cost and design problems.	8 days

Academic Achievement

Grades will be calculated on summative assessment information only. The final calculation will be a fair reflection of a student's achievement of the learning outcomes.

Term Work..... 80%

- **Assessment Activities & Projects..... 20%**
- **Tests 60%**

Final Assessment..... 20%

- **Provincial Standards Exam January or June**