



Course: Pre-Calculus 11

Course Description:

The Pre-Calculus 11 course is designed to provide students with the mathematical understanding and critical thinking skills identified for entry to university level mathematics, science, engineering, or other mathematically intensive fields of study. Topics include: Solving Quadratic Equations, Analyzing Quadratic Function, Graphing Inequalities & Systems of Equations, Trigonometry, Rational Expressions & Equations, Absolute Value & Reciprocal Functions, and Exponential Functions and Financial Literacy.

Overarching inquiry questions:

To what extent does mathematics describe the real world? How do mathematical relationships help us to identify regularities and make predictions?

Course Expectations:

It is expected that students will:

- Abide by the student Code of Conduct
- Adhere to the Academic Honesty policy
- Respect yourself and others
- Attend every class and be punctual
- Inquire, think, and participate to the best of your individual ability
- Access technology in class for learning purposes only & only when instructed to do so
- Challenge yourself and have fun learning

Seycove Learning policies can be accessed at:

[https://www.sd44.ca/school/seycove/About/agenda/Documents/Seycove%20Agenda%20Book%202018-2019%20\(final\).pdf](https://www.sd44.ca/school/seycove/About/agenda/Documents/Seycove%20Agenda%20Book%202018-2019%20(final).pdf)

Evidence of Learning

What the students will KNOW:

- Real numbers.
- Powers.
- Radicals.
- Factoring trinomials.
- Rational Expressions.
- Quadratics.
- Inequalities.
- Trigonometry.
- Financial Literacy.



What the students will DO:

Reasoning and modelling

- Model with mathematics in situational contexts
- Develop thinking strategies to solve puzzles and play games
- Explore, analyze, and apply mathematical ideas using reason, technology, and other tools

Understanding and solving

- Develop, demonstrate, and apply conceptual understanding
- Visualize to explore and illustrate mathematical concepts and relationships
- Apply flexible and strategic approaches to solve problems

Communicating and representing

- Explain and justify mathematical ideas and decisions in many ways
- Represent mathematical ideas in concrete, pictorial, and symbolic forms
- Use mathematical vocabulary and language to contribute to discussions in the classroom
- Take risks when offering ideas in classroom discourse

Connecting and reflecting

- Reflect on mathematical thinking
- Connect mathematical concepts with each other, with other areas, and with personal interests
- Use mistakes as opportunities to advance learning

What the students will UNDERSTAND:

What the students will understand:

- Representing and analyzing situations allows us to notice and wonder about mathematical relationships
- Algebra allows us to generalize relationships through abstract thinking.
- Quadratic relationships are prevalent in the world around us.
- Trigonometry involves using proportional reasoning to solve indirect measurement problems.

Evaluation: based on performance standards and criteria

Learning Activity	Percentage of final Mark
<ul style="list-style-type: none">• Chapter tests and quizzes	80%



SEYCOVE SECONDARY

Formative Assessment

- Homework assignments.

20%