



Course: Foundations and Pre-Calculus 10

Course Description:

Mathematics 10 Foundations and Pre-Calculus is a course that prepares students to become numerate. This pathway is designed to provide students with the mathematical understandings and critical thinking skills identified for entry into post-secondary programs. A big idea in this course is that representing and analyzing situations allows us to notice and wonder about relationships. Through inquiry into the concepts of relationships and communication this course will assist students to develop the ability to conjecture, reason logically, employ quantitative and spatial information, and apply a variety of mathematical methods to solve problems and make decisions confidently and independently.

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:

- operations on **powers** with integral exponents
- **prime factorization**
- **functions and relations:** connecting data, graphs, and situations
- **linear functions:** slope and equations of lines
- **arithmetic sequences**
- **systems** of linear equations
- **multiplication** of polynomial expressions



- polynomial **factoring**
- primary **trigonometric** ratios
- **financial literacy**: gross and net pay

What the students will DO:

- Explore, **analyze**, and apply mathematical ideas using **reason, technology, and other tools**
- Develop, demonstrate, and apply mathematical understanding through play, story, **inquiry**, and problem solving
- **Represent** mathematical ideas in concrete, pictorial, and symbolic forms
- **Reflect** on mathematical thinking
- 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 relationships
- Algebra allows us to **generalize** relationships through abstract thinking

Evaluation: based on performance standards and criteria

Learning Activity	Percentage of final Mark
<ul style="list-style-type: none">• Chapter tests and quizzes	80%
Formative Assessment <ul style="list-style-type: none">• Homework assignments.	20%