Mathematics 15-5

Teacher:
Credits: 5
Course Fee: No fee
Course Prerequisite: Grade 9 mathematics

Course Description

This 5 credit course aims to build confidence in students by addressing cross-curricular competencies in the context of mathematics. The course will provide learning opportunities that will develop student competency in knowing how to learn, thinking critically, applying multiple literacies, identifying and solving complex problems, and demonstrating good communication skills. The course will enhance numeracy skills in students, develop their critical thinking and problem solving abilities, and set them up for success in future courses in mathematics.

Rationale

Inspiring Education has outlined the skills and attributes we expect students to possess as they graduate from high school. We want students to be numerate, have good communications skills, and be critical thinkers and problem solvers. The study of mathematics plays a pivotal role in developing these skills, and as such, it is important that students experience success in a high school math program that best supports their aspirations in high school and beyond. However, the study of mathematics is not a positive experience for all students. Some students struggle to make sense of mathematics as they experience gaps in previous learning and may require additional resources and strategies to fill in these gaps. While the required help is often within reach in their school environment, the one resource that is often lacking is time as the rate at which the content is covered may not allow for mastery learning of important skills.
This course aims to give these students an opportunity to be successful in mathematics and have them reach their full potential as engaged learners by providing them with additional strategies, resources and time.

General Outcomes for Math 15-5

Develop number sense skills: Integers, Fractions, Decimals, Rounding, and Exponents
Develop algebraic reasoning.
Develop polynomial skills.
Develop graphing and coordinate geometry skills
Develop measurement and trigonometry skills

Outcomes Based Evaluation

We have combined Specific Outcomes into ideal groups as indicated in the following table.

Topic of Study	# Days	Weight %
1) Number Sense, Logical Reasoning & Exponents	16	15%
2) Equations and Problem Solving	11	10%
Cumulative Replacement Exam #1	2	5%
3) Polynomials	13	10%
4) The Coordinate Plane & Geometry	14	15%
Cumulative Replacement Exam #2	2	5%
5) Measurement & Trigonometry	11	10%
FINAL EXAM		**30%**

Assessments: A variety of both formative and summative assessments will be used in our math classes. Students should expect assignments, quizzes, unit and cumulative exams. Please note that summative assessments will play a major role in establishing a student's current grade.

PowerSchool: Marks in math are always cumulative. Marks will be updated on a regular basis. Ideally, parents and students should monitor their marks in PowerSchool after the completion of each unit.

Course Expectations: Students need to be aware that the course will move at a consistent pace, often covering a new outcome every day. It is critical that students diligently work on their assigned practice daily. It is normal to expect 30-45 minutes of homework in addition to the time provided in class.

Learning Resources

Textbook: There is no textbook for this class. Students will work in printed work booklets.
Some resources may need to be printed from the D2L shell