



Course Description

This course enables students to develop an understanding of mathematical concepts related to algebra, analytic geometry, and measurement and geometry through investigation, the effective use of technology, and abstract reasoning. Students will investigate relationships, which they will then generalize as equations of lines, and will determine the connections between different representations of a linear relation. They will also explore relationships that emerge from the measurement of three-dimensional figures and two-dimensional shapes. Students will reason mathematically and communicate their thinking as they solve multi-step problems.

Course Units

Unit	Description - Weight (70%)
1	Review
2	Algebraic Expressions
3	Expanding and Factoring
4	Algebraic Equations
5	Analytic Geometry and Statistics
6	Analytic Geometry II
7	Geometry
8	Measurement
	Exam (25%) A comprehensive exam that covers all of the course content.
	EQAO (5%) A portion of the Grade 9 EQAO evaluation will be included as a part of the final mark.

Essential Course Components

To be successful in this course you **must** be able to demonstrate **all** of the following skills.

- Demonstrate mastery of: order of operations (BEDMAS) involving integers and fractions, Pythagorean Theorem and substitution into expressions
- Simplify expressions using exponent rules as well as by adding, subtracting, multiplying and dividing polynomials and collecting like terms
- Expand algebraic expressions using the distributive property; factor algebraic expressions
- Solve first-degree equations and simple second-degree equations
- Identify the characteristics of a linear relation, including rate of change and variation; express linear relations in words, as graphs, in a table of values and as an equation
- Calculate the slope of a linear relation in a variety of ways; identify and compare the slopes and y-intercepts of linear relations in a variety of forms
- Graph a linear relation and solve real-life problems involving linear relations
- Create a scatterplot, identify the equation of the line of best and describe the relationship between two variables
- Recognize and apply the properties and relationships involving two-dimensional shapes; solve problems involving the perimeter and area of two-dimensional shapes as well as surface area and volume of three-dimensional shapes

Procedures

Key values of Sir John A. Macdonald Secondary School and the WRDSB include respect, responsibility, honesty, and trustworthiness. Our expectations for student behaviour and academic conduct come from these core values. In accordance with **Waterloo Region District School Board** guidelines outlined in the **Assessment, Evaluation, and Reporting Handbook**, the following policies are in effect at SJAM:

a) Late and Missed Assignments

Completing tasks on time has been shown to be a key part of school success. It is the expectation that students will submit all required work by the assigned deadlines.

- If work is not submitted on time, next steps will involve student-teacher conferences, parent/guardian contact and may include student referral to in-school supports.
- The teacher will determine a date after which he/she will no longer accept an assignment for marks. In the absence of these student products, teachers will use professional judgement to determine a grade based on evidence of learning available/seen to that point.
- If one or more assignments are not completed, students risk losing the credit for the course.
- The Learning Skills section of the student's Provincial Report Card will be used to reflect incidents of late and missed assignments.

b) Cheating and Plagiarism

It is the expectation that students will submit their own, original work for the purpose of demonstrating their learning. Note that plagiarism includes both sharing original work and using work that is not one's own. In the event that cheating or plagiarism occurs, the following consequences may be implemented, in consultation with administration, depending on the situation:

- The student who plagiarizes will be required to complete the *SJAM Academic Honesty Remediation Tutorial*.
- The student may be required to redo all or part of the assignment or assessment.
- The student may be required to complete an alternate assignment or assessment.
- Consequences may include a loss of access to academic awards and scholarship opportunities.
- Plagiarism will be reflected in the Learning Skills section of the student's Provincial Report Card.
- Potential disciplinary actions may also include suspension.

c) Waterloo Region District School Board Policy for Provincial Report Card marks below 50%

In the following cases, a credit will not be granted:

Grades 9 and 10:

- 45% is the only mark that can be reported for a student achieving below Level 1
- A student may receive an I if there is insufficient evidence to determine a grade

Teacher Contact Information

The teacher for this course is Mr. Taylor. He can be reached at (519) 880 - 9979 or jim_h_taylor@wrdsb.on.ca I am always available for extra help. Book a time or find me in the Math Office or the classroom. For course notes, handouts and other class information visit <http://mrjtaylor.weebly.com/>.

Math and Science Help (MASH) is available from senior students daily. For more information visit <http://sjammash.wix.com/mash>.

Materials

Bring your textbook, notebook with lined and graph paper, a pencil, ruler and scientific calculator to class daily.

Mathematics Contest Information		
	Date Written	Registration Deadline
Beaver	Week of November 7, 2016	October 26, 2016
Pascal	February 28, 2017	February 10, 2017
Fryer	April 12, 2017	March 24, 2017
Canadian Intermediate Math Contest	November 23, 2016	November 4, 2016