



Course Outline

Introduction to Applied & Pre-Calculus Math

Teacher: Mr. Nadeau

Phone: 204-835-2083

Email contact: jnadeau@trsd.ca

Semester: 1 Course Schedule: Days 2, 3, 5, & 6 – 10:05am to 12:00pm

Course Designation: 20S Credit Value: 1.0credit

Prerequisites: 10F Course Code: 3905

“Mathematics is the study of patterns!”

Course Description:

Introduction to Applied and Pre-Calculus Mathematics 20S provides students with mathematical understanding and critical-thinking skills that have been identified for specific post-secondary programs of study. The topics studied form the foundation for topics to be studied in both Grade 11 Applied Mathematics and Grade 11 Pre-Calculus Mathematics. Components of the curriculum are both context driven and algebraic in nature. Students will engage in experiments and activities that include the use of technology, problem solving, mental mathematics, and theoretical mathematics to promote the development of mathematical skills.

General Learning Outcomes:

The main goals of mathematics education are to prepare students to

- efficiently to solve problems
- make connections between mathematical knowledge and skills and their applications
- appreciate the value of mathematics
- communicate and reason mathematically
- become mathematically literate
- make informed decisions as contributors to society

Required Course Materials:

- Textbook – McGraw-Hill Ryerson – Mathematics 10 (2010)
- Pens, Pencils, & Erasers
- 3” Binder and Loose Leaf Paper
- Ruler & Graph Paper
- Scientific Calculator

Assessment and Evaluation Strategies:

The purpose of assessment and evaluation is to improve student learning. Assessment and evaluation is based on the provincial curriculum expectations and the achievement levels outlined in the curriculum document. In order to ensure that assessment and evaluation are valid and reliable, and that they lead to the improvement of student learning, teachers use a variety of strategies throughout the course, including: providing students with feedback about their work (known as assessment for learning), helping to set learning goals and monitor their own progress (known as assessment as learning), and evaluation and reporting of progress in the form of grades and marks (known as assessment of learning).

Course Assessment & Evaluation:

Unit Tests 30%

- There will be 10 tests, one for each of the nine units and one as a review unit
- Each test will represent 3% of the final grade
- Students are allowed half page study sheets for each test
- Extra Help during lunch is offered to students
- Students will have the option to rewrite a test during lunch
- In order to rewrite a test, students will have to attend help sessions at lunch prior to rewriting

Quizzes 20%

- Quizzes will given at the end of each topic to assess understanding
- 20 quizzes each worth 1% of the final grade

Class/Practice Work- 20%

- As students complete daily work, they will gain experience and skills needed to complete different problems. Participation and involvement in the class and materials is important to solidify learning.
- Class attendance is important in order to have continual practice and learning and prevent gaps in learning. It is the students responsibility to catch up on all missed work when absent.

Final Exam 30%

- Students will be allowed one 8.5x11" study sheet for the exam
- The exam is cumulative of all course materials
- The exam will run at the end of January

Late and Missed Assignments - Student Roles and Responsibilities

Students are expected to hand in assignments on the due date. Late assignments will only be accepted by the teacher's discretion. It is up to the student to communicate with the teacher if they cannot complete the assignment on the expected due date. Continual tardiness may result in a loss of marks.

Students are also expected to be responsible for providing evidence of their achievement of the overall expectations within the time frame specified by the teacher, and in a form approved by the teacher; understand that there will be consequences for not completing assignments for evaluation and/ or for submitting those assignments late; use class time productively; in extenuating circumstances, request an extension from the teacher before the due date. *Mark deductions for late and missed assignments may apply.*

Course Timeline / Units of Study:

Timeline	Text Chapter / Topic
September	Ch. 1- Measurement Systems <ul style="list-style-type: none">○ SI Measurement & Imperial Measurement○ Converting Between SI and Imperial Measurements Ch. 2- Surface Area and Volume <ul style="list-style-type: none">○ Surface Area○ Volume Ch. 3 – Right Triangle Trigonometry <ul style="list-style-type: none">○ The Tangent Ratio○ The Sine and Cosine Ratios○ Solving Right Triangles
October	Ch. 4 – Exponents and Radicals <ul style="list-style-type: none">○ Square Roots and Cube Roots○ Integral, Irrational, and Rational Exponents Ch. 5 – Polynomials <ul style="list-style-type: none">○ Multiplying Polynomials○ Common Factors○ Factoring Trinomials
November	Ch. 6-Linear Relations <ul style="list-style-type: none">○ Graphing Linear Relations○ Linear Relations Properties
December	Ch. 7 – Linear Equations and Graphs <ul style="list-style-type: none">○ Slope-Intercept Form○ General Form○ Slope-Point Form○ Parallel and Perpendicular Lines
January	Ch. 8 – Solving Systems of Linear Equations Algebraically <ul style="list-style-type: none">○ Systems of Linear Equations and Graphs○ Modeling and Solving Linear Systems Ch. 9 – Solving Systems of Linear Equations Algebraically <ul style="list-style-type: none">○ Using Substitution to Solve○ Using Elimination to Solve Review

Cell Phone Policy:

Cell phones are not to be used in class unless it is specifically at the direction of the teacher and only used for schoolwork.

- The use of cellphones and other electronic devices is permitted for reference and research purposes **only**. Proper use of devices during class time includes: Work related research for information and testing.
- Technology when used properly can be very helpful.
- Beyond these reasons, use of devices during instruction or work periods is not permitted. Consistent abuse of cellphone use in the classroom, after multiple warnings, could result in a ban of a student's cellphone in class.

Plagiarism/Cheating Policy:

The school handbook outlines the expectations in regards to academic dishonesty (If at any time you are unsure about an assignment it is the student's responsibility to ask for clarification), attendance and the use of technology.

1st offence- The student will receive a zero (0) on the assignment. A phone call/email will be sent to the parent/guardian.

2nd offence- A letter will also be sent home to the parent/guardian. The parent/guardian must sign the letter and return it to the school. The student will receive a zero (0) on the assignment.

3rd offence- The student will receive a zero (0) on their assignment and they will be referred to the principle for further disciplinary action. A meeting will need to be arranged with the parent/guardian to address the severity of this issue.

Classroom Expectations for Students:

1. Every student is expected to keep a neat, well-organized binder:

- class notes and handouts
- homework assignments and tests
- project and task materials
- research work

2. Students are expected to be willing and active participants in all course activities. This includes completing all assignments both on time and with sufficient effort and honoring all of their commitments. (Try your best and remain open to new ideas and to use your time in class for reflection and exploration!)

3. Students will contribute to a positive learning environment by:

- arriving in class on time and either taking their seat or going directly to work.
- bringing *your laptop and notes to every class*
- working quietly and staying on-task at all times.
- Being respectful to others and respecting their property: The art room is a place where all students should feel safe and respected for who they are. Art is an expression of the self that should reflect who we truly are. This cannot happen in a classroom where there is judgment, or hostility.
- always practicing safe work habits and reporting unsafe or hazardous situations to the teacher.
- cleaning up the classroom before and after
- Students are expected to arrive for class on time and prepared (with all required materials).
- If a student must be absent from class, prior notice should be given, and any missed work must be completed immediately after the student returns to class. It is the student's responsibility to ensure all missed work is completed.
- All assignments are to be completed to the best of the student's ability. Substandard work will not be accepted, and the student will be required to redo the assignment properly.
- This is high school art course and students are expected to behave as responsible young adults. As principal duties may require my absence from class on occasion, students are expected to be able to work independently and with limited supervision. This includes being self-sufficient on occasions where I am unable to attend the start of class or am called away during scheduled class time.