

Mr. Hazlewood

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Intro to Applied and Pre-Calculus 20S – Course Outline

Credit Value: 1 Credit**Course Code:** 3905**Prerequisites:** None**Textbook:** McAskill, B. 2010. Mathematics 10. McGraw-Hill Ryerson, Whitby, ON.

Mathematical wisdoms...

“An expert is a person who has made all the mistakes, which can be made, in a very narrow field.”

- Neils Bohr

“Examinations are formidable even to the best prepared, for the greatest fool may ask more than the wisest man can answer.”

- Charles Caleb Colton

“A mathematician is a blind man in a dark room looking for a black cat which isn't there.”

- Charles Darwin

Course Description

The Introduction to Applied and Pre-Calculus Math 20S course is intended for those students who are considering future post-secondary studies in a field that has a mathematical requirement.

The focus of this course is to provide students with a foundational knowledge of both the Applied Math program and the Pre-Calculus program in grade 11 and 12. Critical thinking and problem solving skills will be emphasized, as students begin to prepare for studies that require more independent thought and analysis.

As an introductory course, we will cover a wide range of topics and develop number sense throughout the course. We will begin with measurement and calculating surface areas and volumes, which students should already be familiar with. We will then look at primary trig ratios, which will be brand new for students. The next section of the course will be geared more towards the pre-calculus stream, where we will cover exponents, rational numbers, and factoring polynomials. Lastly we will move back into a more applied approach, as we cover linear relations and equations.

With the new timetable, we will only have classes on 3 of the 6 days in the cycle. Given the new structure of the course, there will be increased emphasis on homework and assigned practice. It will not be marked, but is important to strengthening understanding.

Course Timeline

Sept. 8 – 15	10I.M.1&2 – SI & Imperial Measurement
Sept. 16 – 25	10I.M.3 – Surface Area & Volume
Sept. 26 – Oct. 16	10I.M.4 & R.3 – Trig Ratios & Slope
Oct. 18 – Nov. 19	10I.A.1,2&3 – Exponents/Radicals/Powers
Nov. 20 – Dec. 10	10I.A.4&5 – Polynomials
Dec. 14 – Dec. 18	10I.R.1,2,4,5,8 – Linear Relations/Functions
Jan. 6 – 20	10I.R.6,7,9,8 – Linear Equations
Jan. 24 – Jan. 31	Review & Final Exam!!

** Students who did not complete the distance learning during class suspension or did not demonstrate understanding of the grade 9 curriculum will have additional learning packages to complete while working through the above timeline.

Assessment & Evaluation – The curriculum is available at <https://www.edu.gov.mb.ca/k12/cur/index.html>

Course Work (70%) – Each outcome (or cluster of outcomes) will have a number of formative assessments to help students determine their level of understanding, as well as a final assessment that is weighted according to the amount of time allotted to that section of the course. There are also two major projects that will be completed in this course that will be assessed according to a class constructed rubric.

Final Exam (30%) – This is a Provincial exam set for Jan. 21st @ 9:00 am in our room

Academic Dishonesty – any act of cheating, plagiarizing, or copying of work by a student will result in stiff penalties. The first offense will be a choice of zero on the assignment or a redo at my convenience, as well as a letter sent home to your parents. The second offense will be an automatic zero, with a referral to administration for any further discipline.

Late Assignments – There are no assignments in this course. Both major projects are due on or before the date set. Other than medical emergencies and prior arrangements, failure to do so will result in a grade of 0.

Missed Assessments & Rewrites – Any missed assessment will be given a grade of 0 unless valid reasons are given (*eg. hospitalization*). A student who misses an assessment will be required to complete it during the lunch hour (or spare) **on the day they return to school**. Assessments can be rewritten upon the request of the student, but will only be granted after that student has earned the opportunity. This requires attendance at lunch (or spare) for extra help and practice, as well as multiple formative assessments in order to demonstrate sufficient understanding.

Keys to Success...

- Complete all assignments and questions by the due date
- Ask questions of others in class, and explain what you know to others
- Come in for extra help when needed