McCreary School
Semester 2– 2023/2024
Mrs. Lockhart

Grade 12
Pre-Calculus
Math

COURSE DETAILS
Course Code: 3939
Course Name: Pre-Calculus 40S
Credit Value: 1.0
Prerequisite: Pre-Calculus 30S

CONTACT INFORMATION
Room 14 McCreary School
MS Teams: Grade 12 Pre-Cal
Email: jlockhart@trsd.ca
School phone: 835-2083

COURSE TECHNOLOGY
Office 365
MS Teams: Grade 12 Pre-Cal
Ti-83 Graphing Calculator

COURSE TEXTBOOK
Pre-Calculus 12. McGraw-Hill
Ryerson. 2011

SUPPLIES
➢ 2" – 3 ring binder
➢ Loose leaf
➢ Graph paper
➢ Scientific calculator
➢ Ruler
➢ Pens, pencils, erasers

ONCE YOU HAVE READ THROUGH THIS COURSE OUTLINE WITH YOUR CHILD PLEASE SIGN AND RETURN IT TO THE SCHOOL.

Welcome to
Pre-Calculus

Timeline	Unit & Topic
February	Ch 1: Function Transformations
	Ch 2: Radical Functions
	Ch 3: Polynomial Functions
March	Ch 4: Trigonometry and the Unit Circle
	Ch 5: Trigonometric Functions and Graphs
	Spring Break
April	Ch 6: Trigonometric Identities
	Ch 7: Exponential Functions
	Ch 8: Logarithmic Functions
May	Ch 9: Rational Functions
	Ch 10: Function Operations
	Ch 11: Perms, Combs and the Binomial Theorem
June	Exam Review
	Provincial Exam

We have class period 5 every day of the cycle. That totals 81 days (minus weather, sports, presentations etc). The 11 chapters in the textbook can be added up to 39 sections. I have paced us at a section per day, plus 2 extra days per chapter for wiggle room. Plus, we will be writing 4 tests with 2 review days prior to each. That will leave us with 7 days to review for the final exam.

UNIFYING CONCEPTS & GENERAL OUTCOMES

Grade 12 Pre-Calculus Mathematics (40S) is designed for students who intend to study calculus and related mathematics as part of post-secondary education. It builds on the topics studied in Grade 11 Pre-Calculus and provides background knowledge and skills for the study of calculus in post-secondary institutions.

The course comprises a high-level study of theoretical mathematics with an emphasis on problem solving and mental mathematics. The topics include study of transformations of functions, logarithmic functions, polynomial functions, radical functions, rational functions and the binomial theorem.
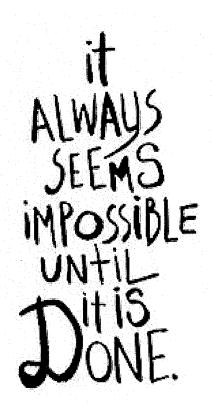
RULES & EXPECTATIONS

➢ Daily Classroom Expectations
Show up to class on time, with all your supplies, and use class time effectively. Take responsibility for your learning by completing all assigned work and being proactive rather than reactive.

➢ Be Kind
Being that this is Mrs. Lockhart's first time teaching this course, things may not always go as planned. Remember to be kind to others and support each other in this journey.

➢ Extra help
Arrangements can be made for in person extra help before or after school or during lunch hour. Students can also ask for clarification or feedback via email, MS Teams chat or discussion post, or schedule a Teams meeting.

➢ Student Lates & Absences
Students who are late for class are asked to come in quietly without causing a disruption. Students who make a habit out of being late may not be allowed into the room if class has already begun.

If you are absent, YOU are responsible for finding out what you missed and making up all missed work. If you have an excused absence for the day of a test, please make arrangements to write it the day you return to school. If you skip a test or quiz you will receive a zero.

➢ Academic Dishonesty
Academic dishonesty including (but not limited to) inappropriate collaboration, cheating, or plagiarism is a severe offence and will be dealt with according to the policy outlined in the school handbook.

ASSESSMENT

➢ **Homework**

You won't have homework every night, but when it is assigned it is expected to be completed on time. In order to get the greatest benefit from scheduled direct instruction, students need to be prepared, which means having assigned work completed.

➢ **Textbook Assignments**

It is expected that all students use class time wisely and complete all assignments on time. A lot of the work students complete will not be graded, but that does not mean that it's not important. These practice opportunities are meant to help both the student and the teacher assess whether or not the student has developed an appropriate level of understanding prior to being given a summative assessment which will contribute to the final grade.

➢ **Outcome Assessments**

Students will be given 1 outcome assessment per chapter. These assessments are open book and students will be given some class time to complete each, but they may also be completed at home.

➢ **Incomplete and Late Work**

Work is to be completed on time and to the best of the student's ability. Late or missing assignments will be penalized as outlined in the school student handbook, "Upon teacher discretion a maximum of 5% may be deducted for every day the assignment is not turned in. If the assignment is not turned in after two weeks or at the start of a new unit, the assignment will receive a mark of zero."

➢ **Chapter Tests**

There will be 4 unit tests throughout the semester. Prior to each test, the class will co-construct a formula sheet that can be used during the test.

➢ **Test Re-writes**

A student may request a test re-write for one of the 4 chapter tests. In order for a student to be eligible for a re-write they are required to complete the "Request to Retest" form. If a re-write is done, the new mark replaces the old mark (for better or worse).

➢ **Optional Video Tutorial**

In addition to the one re-test, students will have the option to replace one test score with a video tutorial project. The student will work with Mrs. Lockhart to create a video lesson that explains the rules/strategies involved in a concept as well as key examples.

➢ **Final Exam**

All students will be required to write the provincial exam on June 11th, 2024. The final exam is worth 20% of the student's overall grade. Students are NOT allowed a study sheet for the exam. A formula sheet will be provided.

Assessment Category	Assessment Item	Category Weight
Outcome Assessments	Students will be assigned one outcome assessment per chapter. All outcome assessments will be weighted equally.	22%
Chapter Tests	There will be 4 unit tests. All tests will be weighted equally. Test 1: Ch 1, 2, 3 Test 2: Ch 4, 5, 6 Test 3: Ch 7, 8 Test 4: Ch 9, 10, 11 If a student is unhappy with their test mark they can: Complete one optional test re-write in June Complete one optional video tutorial	58%
Final Exam	The final exam will take place June 11th, 2024. The details of the exam will be discussed at a later date.	20%

Behaviour Assessment

➢ Personal Management Skills - The student self-monitors own behaviors and personal growth, organizes for learning, contributes positively to the learning process and takes responsibility for work completion.

➢ Active Participation in Learning - The student participates actively in learning, is curious, sets learning goals, self-assesses, provides feedback, and uses feedback for improvement.

➢ Social Responsibility - The student demonstrates citizenship and social skills that contribute to making the classroom, school, and larger community a positive, safe and caring environment.