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MLES MATHEMATICS 12 (PRE-CALCULUS 12)

Course Overview

A continuation of MLES Mathematics 11, this course covers relations and graphing, trigonometry, and numbers and algebra. Students deepen their knowledge and understanding of polynomial, radical and rational functions perform various transformations or operations on functions and work with compositions of functions as well. Additionally, students will receive an in-depth exposure to exponential and logarithmic equations and functions. They continue their studies in trigonometry, where there are two focuses: angles and functions, which are graphical by nature, and equations and identities, which are algebraic in form. Lastly, students explore permutations and combinations, paving the way toward studies in probability and statistics in university. This course helps students further understand, appreciate, and enjoy math so that they can be ready for higher-level university math courses or the workplace. Like MLES Mathematics 11, a heavy emphasis is placed on vocabulary acquisition, journal writing, group discussions and presentations.

Outline of Course Content

Assessment Breakdown:

31 %   Final Exam (EVERYTHING!)

16 %   Midterm Assessment (Unit 1, 2, 3, 4)

3 %   Presentation

50 %   6 Units

Unit Breakdown:

Unit 1	Polynomial Functions (chapter 1) 1 unit test	6 %
Unit 2	Rational & Radical Functions (chapter 2) 1 unit test	6 %
Unit 3	Transformations of / Operations on Functions (chapters 3 and 4) 1 unit test	9 %
Unit 4	Permutations & Combinations (chapter 8) 1 test	4 %
Unit 5	Exponential & Logarithmic Functions (chapter 5) 1 test	10 %
Unit 6	Trigonometry (chapters 6 and 7) 2 unit tests	15 %

LETTER GRADE	PERCENTAGE
A	86 – 100
B	73 – 85
C+	67 – 72
C	60 – 66
C-	50 – 59
I/F	<50

Midterm Assessment

Midterm assessments will be carried out during the scheduled Midterm Assessment Week. This will consist of balanced assessments designed to test your understanding of units 1-4.

Final Exam

Final Exam will be written during the scheduled Final Exam period. It will cover all of the topics taught in the course. Note that the Final Exam is worth 30% of your final grade. This is a significant portion of your overall grade.

Reassessment Policy

A student's final exam mark may be worth 50% of the course if the student scored higher on the final exam than their current in-class mark. This is to provide a more accurate reflection of the students learning as Mathematics is a cumulative course.

Calculators

Scientific Calculators are required for **some** of the Math 12 Unit Tests and Exams. Any scientific calculator that DOES **NOT** have the CALC [solve] button is acceptable.

MLES Math 12 requires the use of a graphing utility. This may be GeoGebra/Desmos on their school computer or a graphing calculator. Students planning on studying calculus are encouraged to buy a graphing calculator.

Math Department Policies

Respect, Participation, and Engagement

Respectful conduct is expected throughout the class. The following are some indicators of the level of participation and engagement that is expected:

- -behaving in a manner that reflects the school policies and expectations as outlined in the student handbook
- -regular sharing of ideas and questions in class
- -active and considerate listening
- -active contributions to group work
- -taking responsibility for catching up any missed work
- -interacting with classmates and teachers in a respectful manner

Attendance

Attendance and participation are necessary for success in this course. If you have to miss a class, please inform your teacher in advance. Please remember that learning is participatory; therefore, not attending classes will affect your learning of course content. Frequent absenteeism, obvious lack of familiarity with topics being dealt with in class, or lack of contribution to the work of the class will negatively impact your final grade.

******Minimum Attendance Policy*****

This is a semester long course, as such if you miss 8 blocks of instructional time during the course of the semester you will be accredited a grade of "W" for "Withdrawn" and will not be permitted to write any exams or receive a final grade in the course. Missed instructional time includes Unexcused Absences, Excused Absences, and Suspensions. Not counted are absences for documented illnesses and In School Suspensions.

If a student is assigned a "W" grade and wishes to reverse it, they must meet the following requirements:

· Complete all missing work in the course.

· Attend 1 hour of tutorial led by the teacher or in the Success Room after school in place of each block that was missed.

· Not miss any further instructional time in the course.

A student who has been assigned a "W" grade is still expected to attend and participate in all classes if they are pursuing a reversal of the "W" grade. After successfully completing their "W" grade recovery package, the absences recovered will be changed to a code of RA for Recovered Absent and will not count toward future absentee reports.

If the student does not wish to reverse the "W" grade or fails to follow the "W" grade recovery agreement set up for them, they will be withdrawn from the course and must attend a Skills and Planning block in place of that class for no credit.

Academic Dishonesty

Any forms of cheating, such as copying homework, quiz, or tests from another students will result in consequences. These consequences may be additional assignments, redoing assignments, receiving a 0 for the assessment, or being removed from the course.

Missed assessments.

Missed assessments must be made-up immediately. You must inform your teacher in advance if you will miss an assessment. Midterms and Final Exams may not be written unless all course work is completed.