

**MAPLE LEAF INTERNATIONAL SCHOOL DALIAN  
COURSE OUTLINE 2018-2019**

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**Pre-Calculus 11**

**Course Overview**

This course is intended to provide a necessary foundation for success in Pre-Calculus 12 and Calculus 12. The three major focuses in Pre-Calculus 11 are Algebra and Number, Trigonometry, and Quadratic Functions. Each topic will be examined with an emphasis on skill development, problem solving and the use of technology. A good, strong foundation in these areas is necessary for success in future math courses.

**Outline of Course Content**

Pre-Calculus 11 is split into 8 units:

**Chapter 1** – Sequences and Series

**Chapter 2** – Absolute Value and Radicals

**Chapter 3** – Solving Quadratic Equations

**Chapter 4** – Analyzing Quadratic Functions

**Chapter 5** – Graphing Inequalities and Systems of Equations

**Chapter 6** – Trigonometry

**Chapter 7** – Rational Expressions and Equations

**Chapter 8** – Absolute Value and Reciprocal Functions

**Assessment and Evaluation**

The assessment for Pre-Calculus 11 consists of the following:

**Mark Breakdown**

Final Exam: 30%

Midterm Exam: 15%

Unit 1: 6.875%

Unit 2: 6.875%

Unit 3: 6.875%

Unit 4: 6.875%

Unit 5: 6.875%

Unit 6: 6.875%

Unit 7: 6.875%

Unit 8: 6.875%

**Letter Grade Breakdown**

A 86% - 100%

B 73% - 85%

C+ 67% - 72%

C 60% - 66%

C- 50% - 59%

I/F less than 50%

**Unit Assessments**

Generally, at the end of each unit there will be a summative assessment. These assessments are worth a large portion of your grade.

**Quizzes/Assignments**

Throughout each unit students will complete several quizzes and assignments to demonstrate their understanding.

**Midterm Exam**

Midterm exam will be written during the Midterm Assessment week. This is a balanced exam designed to test your understanding of the first half of the course, **Chapters 3, 4, 5, and 7.**

**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.

## **Calculators**

Scientific Calculators are required for Math 11 Unit Tests and Exams. **Any scientific calculator that DOES NOT have the CALC [solve] button is acceptable.**

MLES Math 11 may require the use of a graphing utility. This may be GeoGebra/Desmos on their school computer or as an APP on a cell phone.

## **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.

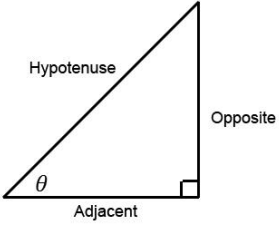
### **Academic Dishonesty**

Academia is founded on honesty and integrity. As members of an academic institution, all students are expected to know, understand, and follow the codes of conduct regarding academic integrity. At the most basic level, this means submitting only original work done by you and acknowledging all sources of information or ideas and attributing them to others as required. This also means you should not cheat, copy, or mislead others about what is your work. Violations of academic integrity lead to serious consequences as outlined in the student handbook. For example, sharing information about tests/exams with other students, or recording information (photos) of tests/exams will result in parents being informed, written warning, and demerit recorded. Further violations will result in suspension and expulsion from the school.

### **Missed Assessments**

If you miss an assessment for any reason, you need to inform your teacher immediately. If you know that you will be missing an assessment before the day of that assessment, it is expected that you will let the teacher know so that they can make the appropriate arrangements with you. If you miss assessments too regularly, your teacher may arrange to notify your counsellor, your parents, the math department head and/or administrators in order to ensure that future assessments are not missed.

**Formula Sheet**

$y = mx + b$ $y = ax^2 + bx + c$ $y = a(x - p)^2 + q$ $y = a(x - x_1)(x - x_2)$ $x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$ $b^2 - 4ac$		$\sin \theta = \frac{Opp}{Hyp}$ $\cos \theta = \frac{Adj}{Hyp}$ $\tan \theta = \frac{Opp}{Adj}$
	$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C} \text{ Or } \frac{\sin A}{a} = \frac{\sin B}{b} = \frac{\sin C}{c}$ $c^2 = a^2 + b^2 - 2ab \cos C$	
$t_n = t_1 + (n - 1)d$	$t_n = t_1 \times r^{n-1}$	$S_\infty = \frac{t_1}{1 - r}$
$S_n = \frac{n(t_1 + t_n)}{2}$	$S_n = \frac{n(2t_1 + d(n - 1))}{2}$	$S_n = \frac{t_1(1 - r^n)}{1 - r}$