**Math SL (Senior)****Instructor: Milford Collins**

**Course Guide and Syllabus E-mail:** milford50@gmail.com

Welcome to year two of IB Mathematics Standard Level. This is the year where math and physics will announce to you their love via the wonderful world of calculus. The course will be rigorous and fast paced. We have a lot of material to go over in order for use to properly prepare for both the AP Calculus AB and IB Math SL exams.

**Nature of the Subject**

Math SL is a two year subject covering topics like Algebra, Trigonometry, Statistics, Calculus and Vectors. Students will need to have excellent algebraic and analytical skills. There would also be an emphasis on math philosophy and theory.

**Topics and Preliminary Timeframe**

**Quarter I: Quarter II:**

* Limits - Stats
* Derivatives and its methods - Vectors
* Related Rates - AP/IB Exam Review
* Functions and Relations

**Quarter II: QuarterIV**

* Integration and its methods - AP/IB Exam Review
* Optimization
* Area between two curves
* Volume and Solids of Revolution

**TEXTBOOKS (supplied by school)**

Haese, Michael, *Mathematics for the International Student Mathematics SL.* Haese and Harris Publications

Finney, Demana, Waits, Kennedy, *Calculus: Graphical, Numerical, Algebraic*; 2003. Pearson Prentice Hall.

**Materials:**

* TI-83+ or TI-84+ graphing calculator (TI-84+ recommended)
* Pencils and Erasers
* One 3-ring binder (1 to 1.5 inch) with dividers (Notes and HW, Quizzes, Test)
* Notebook paper, graph paper and a ruler.
* Colored Pens and Highlighter

**Class Rules and Consequences: R3: Respect, Responsibility, Readiness**

In order to ensure a positive learning environment for all members of this classroom community, we will follow the policies outlined in the SCHS Student Handbook and observe three general rules in this classroom:

1. We will show **RESPECT** for people and property.
2. We will assume **RESPONSIBILITY** for actions and attitudes.
3. We will demonstrate **READINESS** by coming prepared.

**Grading:**

**Course Component/ % of Final Grade Grading Scale**

Tests/Projects 70% A: 90-100

Quizzes 30% B: 80-89

C: 70-79

D: 60-69

F: 59 or less

**IB Honor Code:**

The IB Honor Code emphasizes the importance of academic honesty and integrity in all aspects of the program. As stated in the IB Honor Code, “No grade will be awarded for any student work which violates its code of academic honesty”. In addition, breaches of the IB Honor Code may result in not receiving your IB diploma. You are expected to abide by both the letter and the spirit of the IB Honor Code during all aspects of your work in this course. Failure to do so will subject you to severe academic consequences, as noted above. Please uphold our high academic standards.

**Missed Assignments:**

Students must take the initiative to determine what assignments have been missed and schedule a time (during ELP) to take missed tests or quizzes.  Arrangements to make up missed assignments should be made the day student returns to school. Test, quizzes, and work are not to be completed during class time.

**Math SL**

Signature Page

I have read the Math SL Course Guide and Syllabus and I understand what is expected in this class.

Student Name (printed): \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Student Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

I have read the Course Guide and Syllabus and have discussed it with my Math SL student.

Parent/Guardian Signature: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Parent/Guardian contact information:

* I prefer to be contacted by e-mail at the following address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

OR

* I prefer to be contacted by phone at the following number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_