



SOUTHWEST HIGH SCHOOL

"Inspiring Excellence in Arts and Academics"

Course Name	IB Mathematics Standard Level (SL)
Credit Hours	3.0 credits
Room Number(s)	118 (west building)
Teacher	Robert Rumppe
Contact Information	668-3030 x51112 rrumppe@mpls.k12.mn.us southwest.mpls.k12.mn.us/Mr_Rumppe.html

Course Description/Purpose	The IB Diploma Programme Mathematics Standard Level course is for students with knowledge of basic mathematical concepts who are able to apply simple mathematical techniques correctly. The course provides students with a sound mathematical background to prepare for future studies in subjects such as chemistry, economics, psychology and business administration. Students will be introduced to important mathematical concepts through the development of mathematical techniques in a way that emphasizes subject comprehension rather than mathematical rigor. Students should, where possible, apply the acquired mathematical knowledge to solve realistic problems. All students in the second year of the course are expected to complete one mathematical internal assessment project. Nearly all students in the second year of the course take the IB Mathematics SL Exam in May.
-----------------------------------	---

Prerequisites	Students who are enrolled in IB Mathematics SL are expected to have successfully completed Algebra 2.
----------------------	---

Required Textbooks/Equipment	<ul style="list-style-type: none">• Students are expected to bring the text <i>Mathematics For The International Student-Mathematics SL, Third Edition</i> to class each day.• Students are expected to have a TI-83 or TI-84 graphing calculator.• Pencil, Paper and a pad of graph paper
-------------------------------------	--

Course Goals/Learning Objectives

Units of Study:

- Quadratics
- Functions & Function Transformations
- Exponentials & Logarithms
- Sequences & Series
- The Binomial Expansion
- Trigonometry: Radian measures, Oblique Triangles, Trig Functions, Equations and Identities
- Vectors
- Vector Applications
- Differential Calculus, Rules of Differentiation, Properties of Curves, Applications of Differential Calculus
- Integration, Applications of Integrations
- Descriptive Statistics,
- Probability, Discrete Random Variables, The Normal Distribution
- Linear Modeling

IB Mathematics SL, like most math classes, develops thinking skills. Most topics in this course will start by highlighting foundational information and builds in complexity.

Classroom Procedures/Policies

- Typically, there is time available during class for students to get help with some of the homework problems from the previous assignment.
 - Most class lessons are lecture-based with time for students to practice.
 - Notes from the board are posted to the class website.
 - The assignments will be posted to the teacher's website.
 - Students are welcome to stay after school to get help from me. Students are requested to inform me of their intentions to seek help in advance to ensure I don't have another obligation.
 - Assignments are expected to be completed prior to the next class day.
 - Any student who has an unexcused absence on the day of a test will earn a zero for the exam.
 - Attendance is taken at the start of the class period. Students who are absent and an excuse has not yet been recorded by the office staff will be marked with an unexcused absence. Those arriving within the first ten minutes of class will have their unexcused absence changed to a tardy.
 - Refer to the School Handbook and District policy on excused absences.
 - MP3 devices, Cell phones, and electronic devices that connect to the internet are distractions to learning and therefore are not to be used during class.
-

**Assignments
And
Assessments**

- Grades are updated regularly by the teacher and can be viewed on either the parent or student portals.
- Homework assignments are posted to the class web page
- To earn full credit for an assignment, the teacher will be looking for work shown, and an attempt at each of the problems.
- The assignments account for 30% of a student's grade.
- Any assignments not from the textbook will be posted to the class web page as a .pdf document.
- Grading Scale:

%	A	B	C	D	F
+	92-100	88-89	78-79	68-69	0-59
	82-87	72-77	62-67		
-	90-91	80-81	70-71	60-61	

- The only extra credit offered to students is for participation in the Minneapolis Math League competitions. At the end of the grading period, one percentage point will be added to the overall percentage of points earned for each of the meets in which the student participates. See Coach McMayer for more details about Math League.

Student Code of Conduct

All students are expected to adhere to the Southwest High School and Minneapolis District Citywide Discipline Policy, designed to promote a safe and respectful learning environment. For more information about your rights and responsibilities consult your Southwest Student/Parent Handbook.

**Academic Integrity:
Plagiarism/Consequences**

It is expected that members of this class will observe strict policies of academic honesty and will be respectful of each other. Any instances in which cheating, including plagiarism and unauthorized use of copyrighted materials, computer accounts, or someone else's work is determined, will be referred to Student Services and will be investigated to its full extent. Find a definition of plagiarism on page 10 of the Student Handbook.
