

IB Mathematics Higher Level: Analysis and Approaches

Contact Information

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Course Overview & Objective

IB Mathematics HL is a Higher-Level International Baccalaureate course satisfying the math requirement of the IB diploma. The course will provide students the opportunity to reinforce and extend their mathematical knowledge in the areas of calculus, algebra, geometry, and statistics. In addition, this course will allow for insight into college level mathematics beyond the scope of traditional AP Calculus and AP Statistics, while preparing students to successfully complete the IB Math HL Exam. Students are required to take the IB Math HL exam in May and must also submit an internal assessment to the IBO for grading.

Course Pacing Guide

Each of the following topics will be covered throughout the year and will be divided into smaller units for ease of learning. Tests should be expected on Mondays at the end of each unit.

- Topic 1 – Number and Algebra
- Topic 2 – Functions
- Topic 3 – Geometry & Trigonometry
- Topic 4 – Statistics & Probability
- Topic 5 – Calculus

Grade Distribution

Students will receive an overall grade in IB Math HL based on the following scale:

Major Grades	80%
Minor Grades	20%
Total	100%

Grade Scale

A	→	90-100
B	→	80-89
C	→	70-79
D	→	60-69
F	→	59 & below

All announced quizzes, tests, and projects will count towards the major assessments portion of the student's grade. All other assignments will fall in the minor grades category.

All students are required to submit an Internal Assessment paper which will count as a portion of the Final Exam (10% of the overall class average).

IB Math HL Supplies

Students may use any method they consider appropriate for taking notes, handling worksheets, and staying organized throughout the year. However, it is recommended that students maintain a separate individual 3-ring binder for handouts and worksheets, as well as having loose-leaf notebook paper and a pencil each day for class. Students will be given access to the IB Math textbook via PDF on the Canvas page, as well as the course guide and formula booklet. It is recommended that a student has their own TI-83 or TI-84 graphing calculator at this point.

Homework Policy

Students will be expected to complete homework every night that it is assigned. Homework will help students practice skills learned in class and prepare for quizzes and tests. However, it is not possible to work an example of every possible situation for all skills; therefore, students should be able to apply concepts learned through homework to multiple situations and demonstrate mastery of the skills on given assessments.

Homework problems must show all work...**NO WORK = NO CREDIT!**

Homework will be collected one per week and recorded for a grade based on completion. **Homework assignments must include a coversheet (when turned in face-to-face), be in order, and stapled before turning them in for a grade on the day of each major quiz and unit test.** There will be a 15-point penalty for the first day a homework assignment is late and a 10-point penalty for each day after that!

→ *Note: All homework submission made online must be organized in one file and the students name and class period must appear on all pages.*

Staying Connected

Students are already enrolled in the IB Math HL Canvas course to access PowerPoint notes, homework sheets/answers, live teaching, and project rubrics. It is recommended that students download the Canvas Student app on their phone to have instant access to all important documents.

Additionally, and only after reading through this syllabus, students should access Assignment #1-3 via Canvas which will instruct them to send student & parent email for future contact, as well as to sign up for the IB Math HL Remind account.