

COURSE INFORMATION

This course meets for a full year. Upon successful completion of the course, students will receive one unit of credit. Students who miss more than 10 classes (5 block periods) may be denied credit.

INSTRUCTIONAL GOALS

This course is the conclusion of the International Baccalaureate Mathematics Higher Level Course. At the conclusion of this course, students should have the equivalent of a first semester University course in Calculus and a first semester course in Statistics. This will include the derivatives and integrals of polynomial, rational, logarithmic, exponential and trigonometric functions; first order differential equations; basic descriptive and inferential statistics.

INSTRUCTIONAL ORGANIZATION

Generally, students are taught in a lecture/practice format. Students *may* occasionally work in groups. They may also be asked to explain individual problems to the entire class

INSTRUCTIONAL MEDIA

The primary textbook is *Calculus* (5th edition) by James Stewart. The secondary textbook for this course is *Mathematics for the International Student: Mathematics HL (Core)* by Urban, et. al. (this textbook will be kept in the classroom). Students who lose or return damaged textbooks at the end of the year will be fined accordingly—thus, some type of protective cover must be used with the textbook.

There are no supplemental texts for this class.

There are no instructional videos for this class.

Notes, calendars, test answers, links to helpful sites and other materials can be found at my web site:

<http://www.mrholloman.net>

GRADING PROCEDURES

Each piece of graded work carries a possible point value. The grade for a particular piece of work is found by dividing the earned points by the possible points.

All graded work (except exams) will be returned to the student—usually by the next class meeting.

A student who disagrees with a particular grade may appeal in writing to me. Any adjustments are solely at my discretion.

Note that the IB Programme requires Portfolio problems (and the IB Exam) to be completed in *ink*.

METHODS OF ASSESSMENT

Assessment Categories: **Assignments, Quizzes, Tests, Exams.**

Assignments include in-class problem sets, homework checks, portfolio problems, and other activities. Assignments will have small possible point values (typically less than 10 points each). There are usually 1 - 5 assignments each quarter.

Quizzes are short problem sets (1 - 5 easy/medium problems) which are assigned at random, unannounced times. These are timed activities, usually lasting no more than 10 minutes. Quizzes will have small possible point values (less than 10 points each). There are usually 1 or 2 quizzes per Chapter.

Tests are longer problem sets (5 - 15 problems of varying difficulty) which occur at the end of each instructional unit. These are timed activities, lasting no more than one class period. Tests will have high possible point values (usually 30 - 50 points each). Each test will typically cover 1 or 2 Chapters from the textbook.

Exams are long problem sets (around 20 problems of varying difficulty) which occur at the end of each semester. These are timed activities, lasting no more than 90 minutes. Exams will carry possible point values equal to 25% of the semester's possible points (this makes the exam worth 20% of the semester grade, as per school policy).

HOMEWORK

Homework assignments provide students with the opportunity to practice what has been learned. Thus, students should do as much of the homework as is necessary to understand the material. Homework assignments are not graded—they may be used as the basis for quiz or test questions, however.

Homework assignments will be discussed on the dates listed in the calendar. Students are expected to check their answers *before* this time. A list of all homework assignments is available on my [website](#).

SCOPE AND SEQUENCE

First Nine Weeks	⇒	Derivatives and their Applications
Second Nine Weeks	⇒	Integrals and their Applications Inverse Functions
Third Nine Weeks	⇒	Techniques of Integration Differential Equations
Fourth Nine Weeks	⇒	Review of Statistics Review all IB Topics IB Exam

Please visit my [website](#) for a more detailed calendar of events.

STUDY SUGGESTIONS

Doing homework is the best way to keep up with the course. Quizzes and other assignments serve to keep previously learned skills sharp.

The best way to review for tests is to work out old homework problems and to try other unassigned problems. I will usually suggest review problems from the chapter review, and provide students with a day to ask any questions about the upcoming test.

Attendance is a major factor in student success. Students should make every effort to attend every class throughout the year—absences should be strictly avoided, except in emergencies.

LATE WORK POLICY

Late work is *not* accepted.

Assignments missed due to an **excused absence** will be handled according to the school's make up work policy, as stated in the student handbook (students have 5 calendar days from date of return to complete make-up work).

EXTRA CREDIT

Very few (if any) extra credit opportunities will be offered. Any points offered will be minimal (less than 5 points), and will be added to the student's earned point total for the current nine weeks.

Students who wish to improve their grades should make an appointment with me for additional help.

MATERIALS NEEDED

- (1) A supply of paper—I recommend loose leaf in a three-ring binder
- (2) A graphing calculator
- (3) Pens with black or dark blue ink

EXTRA HELP

I am available for extra help most days before and after school. Students need only make an appointment to receive extra help.

The demanding pace of this course will make it difficult to catch up if a student falls behind—it is imperative that students seek help immediately when they encounter difficulty with a topic.

THE IB EXAM / FINAL EXAMS

The 2009 IB Mathematics HL Exam is broken into three exam periods (Thursday 5 May, Friday 8 May and Thursday 14 May). All students enrolled in the IB Mathematics HL (year 2) course will take this exam.

The IB Exam is *not* the final exam for this course. There will be a final exam for this course in the week preceding the end of school. Students who meet school criteria may exempt the final exam.

DISCIPLINE

I believe that my students are capable of obeying the rules, and that any infractions are either the result of misinformation or choice.

In order to eliminate misinformation, here are the additional (beyond district and school) rules for my classroom:

1:	Students must bring all required materials—pen, paper, calculator and textbook—to every class meeting.
2:	All graded work must be completed in pen.
3:	Textbooks must be covered with an appropriate book cover.
4:	Students must not play games on their calculators.
5:	Students must be attentive and on-task during the class period.

When a student chooses to break a rule, the following consequences apply:

First Offense	Warning
Subsequent Offenses	15 minutes detention per offense
Severe/Persistent Disruptions	Discipline Referral/Removal from Class

In addition, I reserve the right to clear calculator memory at any time.