IB Math Studies
Course Information 2015-2016

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Office Location: IB Office (next to House 4)
Classroom Location: D148
Moodle Website: moodle.anoka.k12.mn.us
→ CPHS→Math→IB Math Studies CPHS
(log into Moodle with your regular school text: username/password and use the enrollment key: Math)

Remind 101 Text Updates:
@ibmath1516 to 81010 and respond with your name
Both Students AND Parents are encouraged to join!

IB Mission Statement:
The International Baccalaureate aims to develop **inquiring**, **knowledgeable** and **caring** young people who help to **create** a **better** and more **peaceful** world through **intercultural understanding** and **respect**. To this end the organization works with schools, governments and international organizations to develop **challenging programmes** of international education and **rigorous assessment**. These programmes encourage students across the world to become **active**, **compassionate** and **lifelong learners** who understand that other people, with their **differences**, can also be **right**.

Textbook
We will use the following textbook by Haese Mathematics: *Mathematics for the international Student: Mathematical Studies SL (3rd Ed.)* Students will check out a copy to use for the year and should bring it to class every day. The book comes with a CD that can be downloaded at home; it contains an electronic copy of the textbook and many helpful resources. Failure to return the CD will result in a $10 fine! To use the CD: click on the "contents" folder, then "DemoBrowser" then click on the picture of the book on the right. You can then see any page in the textbook AND click on the resources!

Required Materials
-Textbook	-Pencils	-Graphing Calculator (preferably TI-83 plus or TI-84)
-Provided note packet	-Pens	-Folder and notebook OR 3-Ring Binder with paper

Pre-Requisite
If you have not successfully completed Advanced Algebra, please see me immediately so we can discuss an appropriate placement for you in another math course.

Daily Expectations:
Assignments:
- Students will be given a unit syllabus at the start of each unit where homework will be given and checked off. Students should also use this to understand what concepts are being covered in the class and as a check to gauge how they are feeling about each learning target. This will keep students on track and allow them to get help as soon as they begin to struggle. (See the "Help" section for suggestions!)
- Homework will be assigned each day. Students are expected to attempt every problem conscientiously and deliberately. Students are also expected to check each answer on the moodle site (see above) or posted in the classroom and ask questions/get help as needed. Some homework assignments will have specific due dates which must be meant for full credit to be received, please pay attention to posted and announced due dates!
- Often students will form study groups on assignments where collaboration is allowed. This is an excellent way to work through difficult material. PLEASE don't hesitate to contact me or another IB Studies teacher to set up a time before or after school if you need extra help. (Mr. FitzSimons & Mrs. Ceronsky are also available)
- There will be frequent writing assignments and group discussions in this class in addition to daily quizzes, tuizzes, projects, and unit tests. Students need to pay attention to the type of assignment and opportunities they have for corrections in order to best learn material and grow in their knowledge.
- Deadlines will be clearly communicated and given in advance. If a situation occurs where a student feels like an extension is needed, please contact the teacher as soon as possible. It will be important for students to keep up with the material—late/incomplete/missing work will receive REDUCED or LOSS of credit and will not be conducive to achieving success in this course.

Tests/Quizzes:

Daily Quizzes will be given frequently (most days) to check for understanding. Mistakes MUST be corrected and will be given FULL credit until the unit tuizz. If a daily quiz is not corrected, it will be given NO credit.

Tuizzes (smaller than a test, larger than a quiz☺) will be given every couple weeks over pieces of the unit. These will be announced in advance and mistakes can be corrected for ½ credit IF done on time and correctly (with all work shown). Deadlines will be announced in class. Failure to meet assigned deadlines will result in reduced or complete loss of correction points.

Unit Tests will be given at the end of each larger unit (about 2 per trimester) and will always be announced in advance. These will cover all previous material in the course, much like a final exam. Unit tests are summative; students will NOT be able to earn additional credit for correcting mistakes on unit tests.

Ms. Hyatt's Test Day Policy: On Tuiz and Test days students who are absent and do not let the teacher know in advance or on the day they are absent (by phone or email) **will be deducted 5% on the assessment**.

Retakes:

THERE ARE NO RETAKES IN THIS CLASS! Students are expected to get help IN ADVANCE of assessments and to come to class prepared to do their best on Tuiz and Test days!

DO YOUR BEST THE FIRST TIME, GET HELP AHEAD OF TIME, COMMUNICATE WITH YOUR TEACHER YOUR NEEDS and EXPECTATIONS!

Important Classroom Policies

- **Late Work**:
  Students needs to understand material on a daily basis, therefore turning in work late is NOT conducive to keeping up in the class. Deadlines will be clearly communicated and given in advance. If a situation occurs where a student feels like an extension is needed please contact me as soon as possible.
- **Cheating**:
  Any incidents academic dishonesty (copying answers/written work or otherwise GIVING OR RECEIVING help on individual work) will be given a zero.
  1) Students will receive a failing grade on the assignment.
  2) Parents will be notified.
  3) National Honor Society and the IB organizations will be notified.
- **Absences**:
  Attendance is critical to success in this course—please make every effort to be in class every day! In the event of an absence, students are responsible for obtaining the work they missed. Extra copies may be found on Moodle or obtained in class (from THE BIN) on the student's return. Students are highly encouraged to speak with me prior to a planned absence or email/call me in the event of an unplanned absence to find out what they will be missing and make special arrangements if necessary. Deadlines for assignments, assessments, and projects are communicated in advance and generally DO NOT CHANGE due to absences, COMMUNICATION is key here!

Student Expectations:

- Rules and expectations will be discussed at the beginning of the course for classroom behavior. Students will be asked to help develop a classroom contract where consensus can be made to create a positive classroom environment. These may include:
  -Come to class each day, on time, prepared, and ready to succeed!
  -Treat one another with respect—this includes personal property, space, and ideas.
  -Participate! Ask questions! Make mistakes!—These are great ways to learn!
- Electronic devises are often distracting to the learning process, therefore students are asked to keep phones on their desk and music off during instruction and group times. Students caught using phones not on their desk will be asked to give them to the teacher and if use is distracting or an ongoing problem phones may be given to student's house office. During independent work time students should be focused on doing their math work but may listen to music as long as the teacher or other students are not being disrupted and it is not a distraction to the student listening to the music. Work takes precedence over phone usage, this is up to the teachers discretion… it is always best to have a conversation with the teacher if there is other reasons a phone is needing to be used during class.

Checking Grades:

I will be updating grades each day within our online system so parents/guardians can always see where his/her student is at in my class. If you have problems accessing this tool or questions about your students progress PLEASE contact me ASAP! ***There is a link to the grade site on my moodle site.***

Course Details

The course concentrates on mathematics that can be applied to contexts related as much as possible to other subjects being studied, to common real-world occurrences and to topics that relate to home, work, and leisure situations. The students most likely to select this course are those whose main interests lie outside the field of mathematics. It caters to students with varied backgrounds and abilities. Students taking this course need to be pre-equipped with fundamental skills and a rudimentary knowledge of basic processes.

IBO Assessment

There are 7 topics in this course which are assessed by IBO. The assessments consist of 2 external assessments called Written Papers and an internal assessment in the form of Project Work.

ALL IB Math Studies students are required to participate. Students will receive registration information in just a few weeks! Cost is typically around $35 (unless you are on Free and Reduced Lunch, then it is free).

- **The 2 external written papers (completed May 10th and 11th)**
  - Externally set and externally marked
  - Paper 1 consists of 15 compulsory short-response questions
  - Paper 2 consists of 5 compulsory extended-response questions
  - Together they contribute 80% of the final mark for the course
- **The Internal written paper (completed Tri 2)**
  - The project is an individual piece of work involving the collection of information or the generation of measurements, and the analysis and evaluation of the information or measurements
  - The project is internally assessed by the teacher and externally moderated by the IBO using assessment criteria that relate to the objectives for IB mathematics
  - The project makes up the final 20% of the course mark

IBO assigns the final mark for all IB enrolled students.

Champlin Park Assessment

Each of the 7 topics assessed by IBO will also be assessed for a Champlin Park letter grade. Each topic will have several assessments including free- response tests, project work, and daily practice. The following grading scale and weighting will be used:

A+	None awarded	A	95 – 100%	A-	90 – 94%
B+	87 – 89%	B	83 – 86%	B-	80 – 82%
C+	77 – 79%	C	73 – 76%	C-	70 – 72%
		D	65 – 69%		
		F	Below 65 %		

Grading Scale Trimester 1:
80% of Grade—Tuizzes/Projects/Unit Tests
40%—Tuizzes
20%—Unit 2/4 Test
20%—Unit 3 Test
20% of Grade—Daily assignments and quizzes

IB Information:

The aim of the IB program is to develop internationally minded people who, recognizing their common humanity and shared guardianship of the planet, help to create a better and more peaceful world. IB learners strive to be:

Inquirers-They develop their natural curiosity. They acquire the skills necessary to conduct inquiry and research and show independence in learning. They actively enjoy learning and this love of learning will be sustained throughout their lives.
Knowledgeable-They explore concepts, ideas and issues that have local and global significance. In so doing, they acquire in-depth knowledge and develop understanding across a broad and balanced range of disciplines.
Thinkers-They exercise initiative in applying thinking skills critically and creatively to recognize and approach complex problems, and make reasoned, ethical decisions.
Communicators-They understand and express ideas and information confidently and creatively in more than one language and in a variety of modes of communication. They work effectively and willingly in collaboration with others.
Principled-They act with integrity and honesty, with a strong sense of fairness, justice and respect for the dignity of the individual, groups and communities. They take responsibility for their own actions and the consequences that accompany them.
Open-minded-They understand and appreciate their own cultures and personal histories, and are open to the perspectives, values and traditions of other individuals and communities. They are accustomed to seeking and evaluating a range of points of view, and are willing to grow from the experience.
Caring-They show empathy, compassion and respect towards the needs and feelings of others. They have a personal commitment to service, and act to make a positive difference to the lives of others and to the environment.
Risk-takers-They approach unfamiliar situations and uncertainty with courage and forethought, and have the independence of spirit to explore new roles, ideas and strategies. They are brave and articulate in defending their beliefs.
Balanced-They understand the importance of intellectual, physical and emotional balance to achieve personal well-being for themselves and others.
Reflective-They give thoughtful consideration to their own learning and experience. They are able to assess and understand their strengths and limitations in order to support their learning and personal development.

Course Content:
The following topics will be covered throughout the year. (Starred topics will be studied this trimester.)

Topic 1- Number and Algebra- The aims of this topic are to introduce some basic elements and concepts of mathematics, and to link these to financial and other applications.

***Topic 2- Descriptive Statistics-** The aim of this topic is to develop techniques to describe and interpret sets of data, in preparation for further statistical applications.

***Topic 3- Logic, Sets, and Probability**- The aims of this topic are to introduce the principles of logic, to use set theory to introduce probability, and to determine the likelihood of random events using a variety of techniques.

***Topic 4- Statistical Applications**-The aims of this topic are to develop techniques in inferential statistics in order to analyze sets of data, draw conclusions and interpret these.

Topic 5- Geometry and Trigonometry – The aims of this topic are to develop the ability to draw clear diagrams in two dimensions, and to apply appropriate geometric and trigonometric techniques to problem-solving in two and three dimensions.

Topic 6- Mathematical Models – The aim of this topic is to develop understanding of some mathematical functions that can be used to model practical situations. Extensive use of a GDC is to be encouraged in this topic.

Topic 7- Introduction to Differential Calculus – The aim of this topic is to introduce the concept of the derivative of a function and to apply it to optimization and other problems.

Project Work- Students will do their own project work. The project is an individual piece of work involving the collection of information or the generation of measurements, and the analysis and evaluation of the information or measurements.

Help!!! "What if I don't get it?"

- If you need help outside of class, PLEASE get it sooner than later--the longer you wait, the more confused you will become!
    - PLEASE don't hesitate to contact me or another IB Studies teacher to set up some time before or after school if you need extra help. I will be more than happy to spend extra time with you to help you understand material or help you get caught up IF YOU MAKE THE EFFORT! I am at school between the hours of 7:15 and 3:15 most days. See my schedule on the board to arrange a meeting time (before/after school, during lunch, or advisement).
    - Find a study buddy—working with others is great, allowing others to work for you is not helpful!
    - The moodle page (see above for access) includes:
        - Updated calendar of class activities
        - Notes posted daily **(MUST ENROLL bottom left to SEE NOTES)**
        - Answers to assignment packet and worksheets
    - Use the CD that comes with your books, there are lots of resources on there!
    - Use YouTube and other online videos to search a topic if you are confused
    - The **homework help center** (*starting mid-September*) **Tuesday, Wednesday, and Thursday in D247** for any student needing help in any subject.
    - Some online resources:
        - Homework Rescue Online Tutoring (through Hennepin County Libraries)
            - www.hclib.org/homework
        - Hippocampus: Provides high-quality, multimedia content on general education subjects to high school and college students free of charge
            - www.hippocampus.org
    - Form study groups to help each other—get to know someone in the class who you are comfortable calling/meeting for help!

Parents/Guardians:
As you communicate with your child about their experiences in this course, remember that I am more than happy to answer any questions and address any concerns that may arise. The easiest way for you to reach me is by email (ashley.hyatt@anoka.k12.mn.us), but you may also reach me by telephone (763-506-6971).

AH Connect--Grades will be constantly updated and available for viewing on AH Connect. This is an excellent way to keep track of academic progress, but feel free to contact me (by phone or email) at any time for an update. I will return your call/email as soon as possible. (email is best)

Moodle-- Class notes, extra copies of handouts, answer keys, and other important documents will be available on the Moodle website: moodle.anoka.k12.mn.us →CPHS →Math →IB Math Studies CPHS PLEASE take advantage of this resource! (Parents cannot access my moodle site so you must have student log in)

Keep the previous blue pages in your 3 ring binder for future reference!
Return this bottom copy to Ms. Hyatt ASAP

I have read, understand and agree to the above course guidelines:

Student Name_____ Student Signature_____

Parent(s) Name_____ Parent Signature(s)_____

The easiest way for you to contact me is by **email** (**ashley.hyatt@anoka.k12.mn.us**). Please feel free to contact me (by phone or email) at any time. I will return your call/email as soon as possible.

Please write any Comments/Questions/Concerns here and/or on the back: