IB Math Studies SL - Syllabus

Fall 2019 - Trimester 1 - Mr. Cedarlund

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Daily Blog: http://blogs.4j.lane.edu/cedarlund/ for assignments, extra help, resources, grades, etc

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Getting Help: Daily before school (7:45 – 8:15 am) and some days after school.

Remind App for this class: Enter 81010 text this message: @ibmath201

Course Objectives:

The primary purpose of this single trimester class is to learn the content associated with the IB Math Studies curriculum and prepare you for the *IB Mathematical Studies SL* exams given in May 2020. You will learn IB math content and review applicable mathematics from previous math courses. Truthfully you have already learned some in the content in your previous Geometry and Algebra classes.

In this class you will also prepare an IB Math project, called the *Internal Assessment*, that will contribute to your overall *IB Math Studies SL exam* scores. Since the curriculum will be changing after this year, freshman or sophomores should not be enrolled in the course this year.

In order to qualify to take the IB Math Studies Exam at Sheldon you must complete this course and at least Pre-Calc A (same as College Now Algebra-Math 111). All students in this course should be already scheduled into Pre-Calc A in Trimester 2 and possibly Pre-Calc B in Trimester 3 (same as College Now Trigonometry -Math 112). You should definitely take Pre-Calc B if you plan to take Calculus sometime in your future or if there is a possibility of you will end up in a STEM major in college. There is a fee to take the IB Math Studies Exam.

Prerequisite for this course: Completion of Algebra 2 with a C- or better.

Course Description/Content:

Since the Internal Assessment requires a lot of statistics, that content will be covered first.

- 1. Descriptive Statistics, including Normal Distribution.
- 2. Two variable Statistics (including Correlation, LSRL, Chi-Square Test of Independence)
- 3. Numerical Trigonometry
- 4. Sets/Venn Diagrams/Probability
- 5. Sequences, Series, Compound Interest, Currency Exchange
- 6. Introductory/Basic Differential Calculus
- 7. Logic
- 8. IB Math Exam Preparation
- 9. IB Math **Project** Preparation

Specific IB Math Studies Standards

A lengthy and detailed list of all Content Standards for IB Math Studies can find be found on the class website.

Grade 11 and 12 students trying for an *IB Math Studies Certificate* or the full *IB Diploma* this year will take your exam in **May 2020.** These students should plan on attending review sessions in April just prior to the exams. Any IB student earning a score of 5, 6, or 7 will receive college credit for Math 105 at all Oregon universities. Credit for other colleges varies. The breakdown in scoring for the **IB Math Studies Score** is as follows:

80% Exams in May20% IB Math Project (done in this class)

Materials Required

- ✓ Textbooks and Materials
 - o Mathematical Studies SL (Haese & Harris Publications)
 - o Handouts given in class
 - o Access to Google Classroom, Docs and Sheets
 - o IB Reference Sheets and Documents
- ✓ **Graphing Calculator**: TI-83, TI-84, or a TI-Enspire with a TI-84 insert. If you don't use one of these calculators, please check in with Mr. Cedarlund. Not all graphing calculators are allowed on IB exams but the ones listed above are acceptable. Calculator apps on electronic devices can be used outside of class but not in class nor on IB exams.
- ✓ **Notebook/Organization:** For each unit you will use a combination of notes you take and notes I provide. What probably works best is a three-ring binder with four sections:
 - 1. IB reference sheets
 - 2. Unit Notes/Classwork which allow for your own notes to be imbedded next to handouts
 - 3. Current Unit homework, kept in chronological order. (or use separate spiral for HW)
 - 4. IB Project documents (or a completely separate folder might work best)

Type of paper: You can get by with mostly ordinary binder paper.

✓ Color Correcting pens, Pencils and erasers, straightedge for graphs

Grading Framework

15% Practice (daily homework and other miscellaneous assignments)

- ✓ Homework should be done the day it is assigned unless noted otherwise. Be cautious of *not* doing homework. Last year in Algebra 2, practice for a particular skill was spaced out over many different assignments. That is not the case in this class. Therefore, it would be wise on your part to keep up daily.
- ✓ HW Answers (not solutions) will be available from your book or on the website.
- ✓ HW Grades will be based off the HW Rubric which will be given to you in class.
- ✓ You are expected to check the class website any day you are absent.

10% Learning Check Quizzes (LCQ's) and Exit Tickets

- ✓ The purpose of LCQ's are to give you relatively quick feedback about your initial learning without having them count too much for your grade. They tend to be short and unannounced so be sure to keep up on a daily basis. On most LCQ's, you can use your notes. Don't count on doing well on these LCQ's if you have not put in the struggle/work on the daily assignments.
- ✓ You will be allowed to drop your worst one third of all items in this category. (keep two thirds)
- ✓ **LCQ's** must be made up, but you must do so within two days or it will become a zero [for a single day absence]. LCQ's not made up will most likely be one of the LCQ's that is dropped for you. On my blog, I will post if an **LCQ** was given.
- ✓ **Exit Tickets** are very short and will be given occasionally at the end of a lesson on learning that should occur during a lesson. If absent, you cannot make it up but it WILL be excused.

75% Tests and IB Math Project Drafts

- ✓ You will be allowed to use the official IB Formula Sheet on all Unit tests. No other notes or notecards will be allowed. (same as with the actual IB exams).
- ✓ Testing policy: Tests must be taken in one sitting. If you are a slow test taker, then you may arrange ahead of time to take half of the test either before school and possible after school. Otherwise you must finish during the allotted class time.
- ✓ If you miss a test because of an excused absence, then you must arrange to make-up the test within 3 although normally I would like you to take it within one day.
- ✓ The last few days of the trimester will be a Mock (Practice) IB Math Studies Exam.

My Expectations

- I. Work on activities and assignments from this class only during the period. Sorry.
- 2. If absent,
 - A. Always check the class website BEFORE you get back to class.
 - B. When you return to class, always pick up class papers from the basket titled "IB Math"

The length of time you have to complete missed work will be the same length that you were absent (Example: If you were absent 2 days, you have 2 days to complete missed work/quizzes)

- 3. I don't mind if you **BRING** beverages and <u>light</u> snacks as long as
 - ✓ you are not tardy.
 - ✓ you don't leave class to go get them.
 - ✓ keep your food to yourself (in other words, you don't disrupt the class)
 - ✓ No fast food soda cups that tip over easily and get the desks sticky.
 - ✓ No stinky fried foods that smell up the class! Sorry. Hamburgers, fries, Ron's, etc
- 4. Cell Phone Addiction
 - ❖ Cell phone use is rampant if there are no limits. If you use your cell phone during class, I will confiscate it for at least one period <u>after</u> your class. *This includes peeking at it in your pocket or your purse.* No warnings. *If you absolutely need to use your phone, then ask to go into the hall to do so. This should not happen often.*
 - You can use your cell phones the last 2 minutes before the end of class for organizational reasons, but no other time.
 - Do not listen to music or use electronics during lessons, discussions, group work, or tests. I don't want to see headphones or earbuds.
- 5. You are all young adults, so there is no need to ask to go to the bathroom, but....
 - a) Just make sure I know before you leave.
 - b) Never leave during a test or quiz.
 - c) Don't make it a daily habit.
- 6. Tardiness: The fifth tardy can earn you a Mr. C lunch/before school detention.

Important Deadlines

- Pass/No Pass option is available for seniors only and must be requested by the 15th day of class.
- Partial credit may be issued under certain circumstances based on attendance and individual situations.
- You can drop a class for any reason through day 15, with no record you were ever enrolled.
- Day 16 until the day date of IB exam registration, you can withdraw from the class, but a WD will show on your transcript. A WD does not affect your GPA. If you want out of the class after the IB exam registration date, you will receive a WF, which is a withdraw/fail, and will be equivalent of failing the class in terms of GPA.