



Pre-Math Analysis (Pre-Calculus) Diploma Level
Ms. Schleper
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I. Course Summary

The objective of this course is for students to learn the fundamentals of Pre-Math Analysis, in preparation for additional study in Math Analysis HL. Successful completion of this course along with Math Analysis SL and or Math Analysis HL will prepare students to take the IB SL or HL examination. There may be projects assigned during the course which will help students prepare for the internal assessment which are a requirement for the mathematics SL and HL courses. The expectation is that all students have successfully completed an algebra 2 course or its equivalent prior to enrollment. There may be an opportunity to earn college credit by successfully completing the CLEP test at the end of the course.

II. Units of Study

Topics covered may include polynomial, rational, exponential and logarithmic functions, trigonometric topics, systems of equations, matrices, sequences, series, probability and analytic geometry.

III. Standards and IB DP Aims

It is the aim of all IB Diploma math courses to develop logical, critical and creative thinking as well as patience and persistence in problem solving. For a complete list of all aims please refer to the IB Math SL Subject Brief at http://www.ibo.org/globalassets/publications/recognition/5_mathsl.pdf

IV. Text/Resources

The text for this class is Pre-Calculus with Limits – Larson and Hostetler copyright 2007. Additional required materials are pen/pencil, folder/notebook, graphing calculator and a charged iPad. These materials are to be brought to class daily. A limited number of TI Graphing calculators are available for check out. Additional information can be found on Schoology.

V. Methodology

In this course the students will have the opportunity to understand and appreciate both the practical use of mathematics and its aesthetic aspects. They will be encouraged to build on knowledge from prior learning in mathematics and other subjects, as well as their own experience. Students will develop mathematical intuition and understand how they apply mathematics in life.

Distance Learning: Distance learning for this class will take place via Schoology and Google Meets. Course materials will be organized by weekly topics. Each week you should expect:

- A video from me explaining new topics
- 1-2 assignments/activities to complete and turn in through Schoology
- 2-3 synchronous learning times
- A check-in assignment and/or a summative assessment

Extra Help

Use your resources! Instructional videos in the Schoology, practice worksheets, Khan Academy, siblings/friends. If you have more homework questions, or just want to see everyone, participate in the weekly office hour to get your questions answered. This is not required, but **HIGHLY RECOMMENDED!**

VI. Methods of Assessment

Grades will be based upon the percentage of points earned. Points may be earned through both formative (30%) and summative (70%) assessment. The formative assessment will consist of homework and class work while the summative assessment may include projects, quizzes and tests. Some of the test questions will come from released IB Math SL External Assessment questions in order to become familiar with the format. For additional details please see the school grading policy which can be found on Highland's website under student resources. As this is not a Diploma Level testing course there will not be an IB grade given.

VII. Expectations

- Be Respectful
- Be Responsible
- Be Safe

Academic Honesty: Highland Park High School expect all students to understand the meaning of academic honesty and demonstrate it in all aspects of their learning. In this class, it is expected that you do not give, receive, or tolerate unauthorized aid in your work. The full policy can be found on the HPSH website.

VIII. Good Digital Citizenship in

Ms. Schleper's Class includes:

- Participate in class meetings only if you are invited. No one else should be on camera.
- Don't take photos or screenshots or record videos during the meeting.
- Show respect at all times for yourself, classmates, and teachers.
- Raise your hand if you want to talk and your teacher will call on you.
- Be present and engaged with your class.
- Wear clothes that would be appropriate for school.
- Be prepared and on time.
- Pick a quiet spot and let others around you know you are in a meeting. Have your materials beside you before the meeting begins. Look around you. Make sure anything on video is something that can be seen by others.
- Participate – take notes, ask questions, and participate in discussions.
- Share your thoughts/ideas. We want to know what you think. YOU MATTER!

I can be most easily reached via e-mail at kelly.schleper@spps.org. For the status of assignment completion and class grades please use Schoology.