I.   Course Summary

The objective of this course is for students to learn the fundamentals of Pre Calculus, in preparation for additional study in mathematics including Calculus. Successful completion of this course along with Calculus 1 SL and or Calculus 2 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 and folder/notebook. These materials are to be brought to class daily. A graphing calculator is recommended for completion of homework. A limited number of TI Graphing calculators are available for check out. Additional information can be found on my website: https://www.spps.org/Page/1820

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.

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 notebook checks 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.   Other Course Information

Homework will be given daily, with time to begin most assignments in class. However, most students will find that they will not be able to complete all of the assignments in class, so homework is to be expected. Homework will be checked for completion and correctness in various matters.

This is a collegiate level course and it is expected that all students will act in a safe, respectful, and responsible manner. All Highland Park school and district policies dealing with absences, tardiness, late work, technology (including cell phones) and other issues will be followed. Additional details can be found on the school's website.

I am available for help most days before or after school, with the exception of Tuesday mornings. I can be most easily reached via e-mail at Michael.mckay@spps.org. You can also try my phone line at (651)-744-3868. For the status of assignment completion and class grades please use the Campus Portal and/or Schoology