I. Course Summary

The objective of this course is for students to learn the foundational mathematics to successfully perform on the Applications and Interpretations (AI) IB exam. The exam and internal assessment are given in the following course, Applications and Interpretations SL. The intent of the AI curriculum is to target students less interested in theoretical mathematics and more application oriented. Students who have a desire to major in math intensive areas, such as engineering, are encouraged to take the IB Analysis and Approaches (AA) track.

II. Units of Study

Topics covered include: linear, quadratic and exponential functions, sets and venn diagrams, exponents and scientific notation, sequences and series, measurement, error, trigonometry, probability and statistics

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 Haese, Mathematics Core Topics SL as well as utilizing curriculum from the Haese Mathematics AI SL. Additional required materials are pen/pencil and folder/notebook. These materials are to be brought to class daily. A graphing calculator is expected for completion of homework. A limited number of TI Graphing calculators are available for check out with priority given to students in economic need based on free/reduced lunch eligibility.

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. 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.

VII. Other Course Information

You will need your math notebook (or binder) everyday. Two points will be given for each day’s homework which will be assessed during class for completion. Note taking will be expected and notebooks will be evaluated during tests, one point given for each day’s notes. “Math review” will occur at the beginning of most classes and will be part of your participation grade- 20 points per quarter. For an excused absence from a class, you should contact me or another student in the class to see what was missed. If you are absent for more than two days, you should see me about getting caught up. It is your responsibility to find out what you have missed. You should be at your desk ready to start with your cell phone away when the bell rings. If you are tardy you will be expected to stay after school (or before on the next day)

Myself or my student teacher are available for help most days after school until Dec 6, just Thursdays and Fridays in the winter, and by appointment in the spring. I can be most easily reached via e-mail at michael.o’connell@spps.org. For the status of assignment completion and class grades please use the Schoology and/or Campus

Parent signature: _________________________________