Math Refresher

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Teaching Assistant:

The first class will be Tuesday, June 1st for the summer of 2021

This course introduces students to the math required for quantitative courses such as economics, statistics, and finance at the Maryland School of Public Policy. The skills necessary to thrive will include a comfort level with basic algebraic manipulations, an understanding of some differential Calculus, and more. The following topics will be covered during the summer: graphing, probability, solving systems of equations, logarithms, rules exponents, basic differentiation, the Langrangian technique, and some additional topics.

Class will be held each **Tuesday and Wednesday evening at 6:30pm-7:45pm**, while discussion sections will be held each **Thursday from 6:30pm-7:45pm**. In all time slots, there will be ample time for students to practice problems and to ask questions in addition to being introduced to new topics. You do not need to come to all time slots; it is just a way to provide you with maximum opportunity to learn and practice the links between policy and math!

The Optional (though recommended) textbook for the class is Mathematics with Applications 9th or 10th Editions (or earlier if need be) by Lial, Hungerford, and Holcomb. *I strongly suggest buying the cheapest version of the text you can find.*

A fun book for statistics is "Naked Statistics" by Charles Wheelan. You won't regret buying a cheap used version, but it is not necessary for this course.

Topics Summer 2021:

Date	Topic
June 1-3	Overview of Required Math+ the Basics
June 8-10	Solving Systems of Linear Equations
June 15-17	Graphing + Quadratic Equations
June 22-24	Exponents and Logs + Intro to Calculus
June 29-Jul 1	Micro Applications of Calculus +Utility Maximizations
July 6-8	Micro Applications of Calculus + Cost Minimizations
July 13-15	More Advanced Calculus Topics + Monopoly Math
July 20-22	More Advanced Calculus Topics (finding mins, maxs, pts of inflection)
July 27-29	Probability and Stats
August 3-5	Probability and Stats
August 10-12	Probability and Stats