**Statistics & Probability Curriculum Overview 2018 - 2019**

**Ms. Gladstone**

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B Period

**Course Website:** [www.ms-gladstone-math.weebly.com](file:///C:\Users\Miriam\ALL\Hopkins%20Academy\www.ms-gladstone-math.weebly.com)

**Course Overview:** Welcome to Statistics and Probability. This course will introduce data analysis, distributions, confidence intervals, hypothesis testing, correlations, and regressions. Our goal for this year is to become better-informed consumers of news, media, facts and data.

Required Text: Bock, David E., et al. *Stats: Modeling the World.* Pearson, 2010.

**Curriculum Overview:**

First Quarter

Unit I: Exploring and Understanding Data

Chapter 1: Where do we Begin?

Chapter 2: Data

Chapter 3: Displaying and Describing Categorical (Qualitative) Data

Unit II: The Beginnings of Quantitative Analysis

Chapter 4: Displaying and Summarizing Quantitative Data

Chapter 5: Describing Distributions Numerically

Chapter 6: Standard Deviation: a Ruler and the Normal Model

Second Quarter

Unit III: Regression

Chapter 7: Scatterplots, Association and Correlation

Chapter 8: Linear Regression

Chapter 9: Regression Wisdom

Chapter 10: Re-Expressing Data

Third Quarter

Unit IV: Randomization, Experimentation and Sampling

Chapter 11: Understanding Randomness

Chapter 12: Sample Surveys

Chapter 13: Experiments

Unit V: Probability and Random Variables

Chapter 14: From Randomness to Probability

Chapter 15: Probability Rules!

Chapter 16: Random Variables

Chapter 17: Probability Models

Fourth Quarter

Unit VI: Hypothesis Testing and Curve Examination

Chapter 18: Sampling Distribution Models

Chapter 19: Confidence Intervals for Proportions

Chapter 20: Testing Hypotheses about Proportions

Note: This curriculum is our goal, but the order of units, speed at which we progress, and ultimately the content that we get through this year is subject to change.