Recently, Goucher College went through a campus-wide curriculum change that included replacing, our “Mathematical Reasoning” general education requirement with a Data Analytics requirement that requires students to take one semester-long course learning the foundations of data analytics and then another semester-long course learning data analytics techniques in the context of another discipline, usually their major. Additionally, Goucher has decided to discontinue the traditional mathematics major and start a new Integrative Data Analytics (IDA) major. As a result of these changes, our first semester calculus class has been redesigned to fulfill the first part of the data analytics requirement, and to weather its transition from a foundation of the mathematics major to a foundation of the IDA major. This talk will focus on the development and evolution of this course, Calculus Through Data and Modeling, which covers topics in both single and multivariable calculus with an applied focus, while also addressing data literacy, and computational proficiency in RStudio or Excel. (Received September 12, 2019)