In this course we’ll explore the world of math that lies beyond calculus, and before it, and beside it. As resources, we will use some of the many excellent videos available on the web. For examples, check out these links: Vi Hart, 3blue1brown, Mathologer, Numberphile, Veritasium, Physics Girl.

The term will begin with a crash course in Mathematica using Wolfram’s online introduction. This will give students the tools to do computer explorations. No CS background is required here. (In fact, previous programming experience can be a distinct handicap in getting used to Mathematica’s functional style.)

This is a project-based course. In addition to small explorations presented in show-and-tell sessions and journal submissions, students will complete two major projects (the second may be an outgrowth of the first).