A polynomial equation $f(x, y) = 0$ defines a curve in the plane. For example, $x^2 + y^2 - 1 = 0$ defines the unit circle. Given two such curves, a natural problem is to count the number of points in their intersection. In this talk, I will consider this problem through lots of examples, culminating in the beautiful answer given by Bézout’s Theorem. If time permits, I might also discuss an application of this theorem to elliptic curves.

**Thursday, November 30, 2017**

**BSS 204, 4:00 pm**