John Jones* (jj@asu.edu), Dept. of Mathematics and Statistics, PO Box 871804, Arizona State University, Tempe, AZ 85287-1804, and Jeff Holt (jjholt@virginia.edu), Dept. of Statistics, P.O. Box 400135 Kerchof Hall, University of Virginia, Charlottesville, VA 22904-4135. An inquiry-based number theory course.

We will discuss a number theory course where students discover most of the theorems and provide their own proofs. During class time, students work together in a computer lab conducting numerical experiments which help them make good conjectures, which they then try to prove. Course materials include Maple worksheets/Mathematica notebooks designed to guide students to the main theorems of the course. There is also a version of the course materials which works with just a web browser. (Received September 15, 2006)