Lara Pudwell*, Department of Mathematics and Statistics, 1900 Chapel Drive, Valparaiso, IN 46383. Teaching Inquiry through Experimental Mathematics.

Since 2009, Valparaiso University has offered a junior-level course in Experimental Mathematics as an elective for mathematics majors and minors. Rather than focusing on a particular list of content, the goal of this course is to cultivate an attitude of exploration in students’ approaches to new problems. Along the way students learn basic programming using a computer algebra system and work on independent research projects throughout the semester. This talk will describe the setup of the course and give particular examples of experimental class activities. (Received September 08, 2014)