1086-H1-2379   **Edwin P Herman*** (`eherman@uwsp.edu`), Department of Mathematics, University of Wisconsin-Stevens Point, Stevens Point, WI 54481. *Are Numbers Real? – a First Year Seminar.* Preliminary report.

As part of a recent initiative at the University of Wisconsin-Stevens Point, I created and taught a Freshman Seminar in Fall 2012. Instructors were expected to blend various "introduction to college" outcomes with topics that excited the instructor. I decided to explore numbers and number systems - I wanted students to question the form, meaning, and operations of the numbers they simply take for granted. My first cohort was about 50% declared STEM majors and 40% undeclared.

The course started by exploring cultural and historical views about numbers, looking at notation and counting but also thinking about how language shapes perception of numbers. After touching on Ethnomathematics, the course shifted to analysis of particular number systems, such as Gaussian Integers and cyclic groups, investigating how they differed from ordinary integers. The course finished with a brief development of p-adic numbers. Along the way, we dealt with more mundane concepts such as choosing a major and finding valid sources for a paper.

In my presentation I will discuss the topics covered and what worked (or didn't); student feedback on the course will also be given, and an attempt will be made to gauge the impact (if any) this course has on students' interest in the mathematical sciences. (Received September 25, 2012)

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