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If Not Calculus, Then What?

After giving an outline of a large-scale initiative at McMaster to introduce mandatory literacy and numeracy requirements for all students in Science, Social Sciences and Humanities, I will focus on my experiences with creating and teaching my vision of a numeracy course.

The course "Numbers for Life," now in its second iteration, is (among other things) my attempt at trying to answer the question many of us are asking – if a student needs to take only one math course at university, what would that course be? Calculus and linear algebra are needed for further math development; however, they place numerous constraints on the content that can be used to discuss applications. We have to admit that many "real life" applications in textbooks for these courses are artificial and not at all real life. In designing my course I worked backward, by looking at quantitative narratives addressing important contemporary issues in books, newspapers and internet, and then extracting (rich!) math content from it.

Besides presenting "Numbers for Life" course design and showing a few examples, I will discuss related future plans, which include bringing non-traditional math content into level 1 courses for Math and Stats majors.