Department of Mathematics and Statistics Colloquium

A Modeling Approach to Calculus

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Abstract: In Spring 2015, I took advantage of an educational leave to focus on the development of web-based math learning resources and a new course sequence (Math 233-234) that would be an alternative pathway for completion of Calculus 1. Originally conceived as a Calculus for Life Sciences track, much of the design was motivated by curricular objectives outlined in reports like the National Academy's BIO 2010 report (2003), the AAAS Vision and Change in Undergraduate Education (2011), and the joint AAMC/HHMI Scientific Foundations for Future Physicians report (2009). My current intent for the course is much broader than just life sciences, motivated by SIAM's Modeling Across the Curriculum initiative and the MAA CUPM report's emphasis on modeling. This talk will introduce the goals and course design of Math 233-234 as well as discuss some of the technological tools that I developed and others that I found.

Monday, March 14 at 3:45 in Roop 103 refreshments at 3:30