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(garfield@math.ucsb.edu). Calculus Applied! An Online Resource for Students and Teachers of Calculus to Explore Calculus' Connections to Other Fields Through the Lens of Practitioners.

Millions of students take calculus each year, many as a prerequisite for another field of study or future career. But the exposure students get to applications of calculus is often limited to short problems on homework or in a textbook.

In this talk, we'll introduce "Calculus Applied!", a massive open online course (MOOC) we will launch in Summer 2017, which features practitioners from various fields discussing actual problems in their fields. The course is designed for participants to actively engage in topics from mathematical biology, economics, physics, psychometrics, and medical imaging, among others, using short videos of experts discussing the role of calculus in modeling and making sense of problems, interspersed with problems to try and dynamic graphing exercises.

This MOOC is aimed not only at students in the first year of calculus, but also at high school and college instructors who want to supplement their single-variable calculus course.

Time-permitting, we'll discuss the potential impact of these types of activities on student attitudes about the relevance of mathematics to their future fields of study. (Received September 20, 2016)