Online Seminar on Undergraduate Mathematics Education

Reshaping the Calculus sequence for Engineering students

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This is the story, or at least my version of it, of how the Applied Math faculty tried to update the calculus curriculum in our Engineering School to fit departments' requirements and our desire for course innovation, after decades of stagnation. We designed three different tracks to map all entering students, with track selection

based only on their math background. Each track was built on active learning pedagogies with in-class teaching assistants. An online "Math Lab" library [this was before Covid] was created throughout the project, and it was made available to all our students as reference material. The result was mixed. I will discuss what went well, just ok, or bad, what we learned from the experiment, and how this is helping us to design new math courses for non-math majors with a focus on DEI.

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Zoom link: https://cornell.zoom.us/j/92415199317, passcode olsume

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