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Should First-Year Calculus be Taught by Physicists?

How much calculus do non-math students actually need to be able to apply key concepts in real-life applications? Although a substantial amount of calculus is required to formally derive many important equations in science-based disciplines (e.g. equations of motion or population dynamics), is there a way to obtain many of these results by an exercise in critical thinking? Alternative topics that should be considered for such a first-year service calculus/math course will be discussed from the viewpoint of a physicist in the context of some selected examples to demonstrate how critical analysis can be used to obtain the answer without the use of advanced mathematics.