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**An alternative Calculus I course.**

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From the text: Calculus I at post-secondary institutions has historically been perceived as a “filter” that blocks access to professional careers in STEM fields. Failure in Calculus I is commonly identified in the literature as a grade of D or F or a withdrawal from the course. Negative experiences in introductory courses are a contributing factor to students leaving STEM disciplines. Poor instruction is often to blame for such experiences. The focus for this paper is on improving success rates in Calculus I for Physical Scientists I courses (referred to as Calculus I in this narrative) offered at our institution and also to discuss strategies for instruction in a Calculus I classroom.

*Classification:* I15 D45

*Keywords:* calculus; university teaching; teaching methods; pilot course; student-centred learning environment; experience reports; problem-based learning; cooperative learning; repetition; mathematical model building; daily reflections; metacognitive abilities; educational research