

# Review of: "Essential Calculus, a Revolutionary Approach to Teaching Calculus"

Vincenzo Vespri<sup>1</sup>

<sup>1</sup> University of Florence

**Potential competing interests:** No potential competing interests to declare.

## Review of: Essential Calculus, a Revolutionary Approach to Teaching Calculus

This contribution is motivated by the need to synchronize the students' mathematical knowledge with the need to use them: physics problems, for example, require the use of differential equations which will be studied in mathematics a few years after their practical use. The author proposes a crash course which he defines as revolutionary.

The paper is at draft level and contains many inaccuracies. The opening paragraph about falling objects is quite incomprehensible. The proofs are often only hinted at and sometimes contain inaccuracies. The usefulness of this approach has not been convincingly demonstrated: is it helpful or detrimental to future understanding if students get a rough and inaccurate understanding of differential calculus? It would have been necessary for the author to cite concrete case studies that support his teaching approach, otherwise all the perplexities about this approach, which does not take into account the good teaching practices developed over the last three centuries, remain intact.

In this form, I cannot recommend this paper for publication. Before being accepted for publication, the Author should rewrite it by correcting the numerous inaccuracies and should demonstrate, in a convincing way, the didactic utility of the proposed didactic approach.