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Patricia Baggett* (baggett@nmsu.edu), Dept of Mathematical Sciences, MSC 3MB PO Box 30001, New Mexico State University, Las Cruces, NM 88003-8001, and **Andrzej Ehrenfeucht**. *A mathematically rigorous calculus course in a laboratory format for undergraduate and graduate non-math majors*. Preliminary report.

We offer a calculus course for students who are seriously interested in math education at any level, but who may not have sufficient prerequisites in algebra, analytic geometry and trigonometry to take a standard calculus course. The course covers operations on functions that include arithmetic operations, composition, derivatives and integrals. Students learn the intuitive meaning of all operations and technical definitions and how they are computed. All computations are carried out on TI-84 graphing calculators. The course is in a laboratory format where the tasks involve design and construction of physical objects, and their successful completion requires the use of calculus. In the talk we'll present informal and technical definitions used in the course; examples of a few tasks with brief descriptions of their solutions; students' comments and evaluations of the course; and internet links to most of the materials used so far, including calculator programs needed for processing data and for other computations. (Received September 10, 2015)