

1035-97-1053 **David A. Smith*** (das@math.duke.edu), 1408 Shepherd St., Durham, NC 27707. *Modeling as Motivation in an Online Calculus Text.*

Project CALC: Calculus As a Laboratory Course, begun some 20 years ago, is entering a new phase with the development of a second edition of the textbook, *Calculus: Modeling and Application*, as an interactive, online book. The text addresses a broad mainstream of students in single-variable collegiate calculus, but not with a standard syllabus. We recognize that the overwhelming majority of students in this course have primary academic interests outside of mathematics. From the outset, we introduce "real world" problems as motivation - many in the form of differential equations - to convince students that the key ideas of calculus are interesting (to them) and accessible (to them). This talk will include a description of the structure and interactive features of the book, as well as explicit examples of the role played by modeling. (Received September 18, 2007)