

1023-Q1-1572 **William S. Mahavier*** (wsm@emory.edu), Department of Mathematics and C. S., Emory University, Atlanta, GA 30322. *Getting students to prove theorems in analysis.*

I will discuss a course I regularly teach at Emory University in Atlanta, Georgia. It begins with the topology of the real numbers and continues with continuity, differentiability and integrability with the goal being the fundamental theorems of calculus. This seems formidable for sophomores and we sometimes don't reach our goal. How do I proceed? What are the details? How do students get a deep and lasting understanding of these difficult concepts? These are the secrets I will discuss in this talk. Most class periods are spent with the students presenting their work at the board. My notes for the course have been used for a similar course at Xavier University in Ohio, Lamar University in Texas, Augusta State University in Georgia and Birmingham Southern in Alabama. Please feel free to contact me (wsm@emory.edu) or talk with me if you are interested in seeing them. (Received September 26, 2006)