

1086-C5-1846

Roberto C Pelayo* (robertop@hawaii.edu), University of Hawaii at Hilo, Mathematics Department, Hilo, HI 96720. Transition to Mathematical Proofs: *Assessment of an online proofs course*. Preliminary report.

In most universities, transitional proofs courses are held in the second or third year of a math major's academic journey to prepare him/her for the rigors of mathematical writing in upper-level courses. At the California Institute of Technology, though, undergraduate students are expected to write fluent, complete proofs in the first quarter of their Freshman year. To address this unique situation, Caltech has established *Math 0 - Transition to Mathematical Proofs* as an online course for incoming Freshmen. This presentation will describe the framework of this course, as well as the various challenges associated to offering such a distinctive resource for its pre-Freshmen. Also, statistical and qualitative data demonstrating the effectiveness of this course will be presented. (Received September 24, 2012)