

1096-N5-859

Carrie Diaz Eaton* (ceaton@unity.edu). *Can Furry Animals and Albedo Replace Epsilons and Deltas in Calculus?*

Calculus classes targeted towards undergraduate students in Biological Sciences are designed with highly conceptual learning objectives important in modeling. Faculty in the biological sciences are look for learning outcomes from Calculus that may be different from the traditional Calculus sequence, and often with increased credit constraints. Content shifts in curriculum have replaced some advanced symbolic manipulation techniques with difference or differential equations and technological tools for modeling. Does this trade-off hinder students' understanding of traditional Calculus concepts?

We find that students enrolled in Biocalculus I perform as well as their counterparts in Calculus I conceptual knowledge gains, even as well as their active learning counterparts when corrected for contact hours, and have an increased appreciation for the role of mathematics in their everyday lives and careers as well as the intrinsic value of mathematics. (Received September 10, 2013)