

1056-Z1-1282 **Jessica M Mikhaylov*** (jessica.mikhaylov@usma.edu), US Military Academy, Department of Mathematical Sciences, West Point, NY 10996. *Be the Volume: A hands-on method for presenting the estimation of volume under a surface.*

Often calculus students have difficulty visualizing surfaces. This difficulty can hinder a student's ability to understand volume calculations using iterated integrals. This talk will present a hands-on learning experience that can be done in the classroom in which the students themselves become the function values on a defined domain. The presentation includes a description of the method, pictures of the method being implemented in a classroom, a short discussion of potential issues, and some follow-on activities that can be used to demonstrate Fubini's Theorem and other related concepts. (Received September 21, 2009)