1014-Z1-777 William W Johnston* (johnston@centre.edu), Centre College, 600 W. Walnut Street, Danville, KY 40422. Teaching the Lebesgue Integral to Undergraduates: A New Course.

This presentation reports briefly on Integration Theory, a new mathematics course taught last spring term in the Centre College curriculum. An innovative text by Alan J. Weir makes Lebesgue integration accessible to undergraduate juniors and seniors with minimal prerequisites. The addition of this course can thereby have a positive influence on any institution's mathematics curriculum. The course outline and a report on the several successes of the spring term course will be provided. (Received September 23, 2005)