

962-I1-293

Daniel King* (dking@mail.slc.edu), Department of Mathematics, Sarah Lawrence College, One Mead Way, Bronxville, NY 10708. *From Calculus to Topology: Lecture-Free Seminar Courses Throughout the Curriculum*. Preliminary report.

Classically-structured seminars-lecture-free courses emphasizing discussion and student involvement-in the discipline of mathematics have traditionally been relegated to the graduate level. In a relatively recent break with this tradition, some undergraduate programs are now offering lecture-free courses to their advanced mathematics majors. However, there have been far fewer documented efforts to incorporate seminar-structured courses at all levels of the traditional undergraduate mathematics curriculum. This paper discusses the author's experiences in teaching such courses at Sarah Lawrence College and Oberlin College. Discussed here is the author's motivation for breaking with the lecture tradition, the specific structure of the seminar courses taught, and a critical evaluation of their outcomes. The author concludes that students at all levels of mathematical ability and quantitative proficiency are capable of benefiting from a lecture-free approach in the classroom. (Received September 07, 2000)