

962-I1-573

Janet C. Woodland* (woodland@comp.uark.edu), Department of Mathematical Sciences, University of Arkansas, Fayetteville, AR 72701. *The Senior Mathematics Seminar as a Capstone Experience.*

Our "mathematics major seminar" was instituted two years ago to provide graduating students with a greater sense of the scope of the mathematical sciences, and to synthesize the various components of the undergraduate program. It is required for all mathematics majors (BA and BS). The two-credit course has several components designed to address students' mathematical knowledge, problem-solving and communication skills. Weekly seminars on topics of historical or cross-disciplinary interest are accompanied by a problem-solving sessions in which student presentations play a part. The course is also a forum for sharing information about career opportunities and preparation for employment. Students are required to react both orally and in writing to the ideas presented in the seminar. A brief expository paper is required in preparation for satisfying the senior writing requirement. The final element is a comprehensive exit exam. In the last weeks of the semester, an overview of major topics in the undergraduate mathematics curriculum are reviewed (with some emphasis on interrelations among subjects). I will discuss in more detail the resources used in the course, evaluation of students' progress, and student reactions to the "capstone" experience. (Received September 15, 2000)