

Meeting: 1003, Atlanta, Georgia, MAA CP X1, MAA General Contributed Paper Session, I

1003-X1-450 **Kathleen M. Shannon*** (kshannon@salisbury.edu), Department of Mathematics & Computer Science, Salisbury University, Salisbury, MD 21801, and **Homer W. Austin**, Department of Mathematics & Computer Science, Salisbury University. *A Discrete Mathematics Course for Lower-Division Majors in Mathematics, Computer Science and Education*. Preliminary report.

During the 80's arguments flourished for giving discrete mathematics a place parallel to Calculus as introductory college mathematics. In the 90's we shifted towards upper-division courses where discrete mathematics was essentially anything but Calculus. We also saw a proliferation of courses offered in computer science departments instead of mathematics departments. The pendulum seems to be swinging back. The 2004 CUPM Curriculum Guide notes the "increasing availability of ...freshman-level discrete mathematics courses with a focus on logical argument and writing simple proofs." while "noting that much of the impetus for discrete mathematics courses has come from computer science departments, which have valued the contribution of these courses to students' general intellectual development as much or more than the specific topics they contain." [Page 14] In this paper we describe a course in discrete mathematics, consistent with both the CUPM and ACM recommendations which serves a triple audience of mathematics majors, computer science majors and mathematics minors, particularly those majoring in elementary education. We also make an argument for offering such a course and for combining these audiences and will describe our experiences with three semesters of offerings. (Received September 14, 2004)