

Meeting: 1003, Atlanta, Georgia, MAA CP C1, MAA Session on Courses Below Calculus: A New Focus, I

1003-C1-1149 **Suzanne I Doree*** (doree@augsborg.edu), Augsburg College #61, 2211 Riverside Avenue, Minneapolis, MN 55454. *Who Takes Algebra in College and What Do They Need to Know? Case Study: Augsburg College.* Preliminary report.

College algebra is often seen as a step toward calculus. But how many of our students go on to calculus? At Augsburg College we found over 90% do not. Why do they take algebra? The most basic answer is it's required for our students who don't place out of it. But the deeper answer is they are preparing for an array of quantitative courses — statistics, elementary science, economics, computer science, and other quantitative reasoning courses. They need different content and a different approach. In 1994 we designed our course in consultation with the client disciplines to focus on linear, exponential, and modeling, and presuming little previous knowledge of algebra. Most importantly, we began to teach all of the content in concrete, applied contexts. By connecting algebraic methods with common sense, our "Applied Algebra" course engages students and gets them to think about the meaning of the mathematics. We are pleased that the course fits well with both AMATYC and the recent CUPM guidelines. Around 83% of our students pass (17% FDW) from a diverse audience including returning adults and students with learning disabilities. Students like the course and do well in later courses. We are looking for class-testing sites for fall 2005 for our materials. (Received October 04, 2004)