1014-ZB-297 Barbara B Ward* (wardb@mail.belmont.edu), Dept. of Mathematics and Computer Science, Belmont University, 1900 Belmont Blvd., Nashville, TN 37212, Mike Pinter (pinterm@mail.belmont.edu), Dept. of Mathematics and Computer Science, Belmont University, 1900 Belmont Blvd., Nashville, TN 37212, and Mary Goodloe (goodloem@mail.belmont.edu), Dept. of Mathematics and Computer Science, Belmont University, 1900 Belmont Blvd., Nashville, TN 37212. Developing and Assessing a Mathematics Inquiry Course. Preliminary report.

As part of our assessment of the major, the Department of Mathematics and Computer Science at Belmont University is conducting an extensive study of a new math course. Mathematical Inquiry is a required general education math course for calculus-ready freshmen; including mathematics and computer science majors. The primary purpose of the study is to determine the role that Mathematical Inquiry plays in the development of problem solving and critical thinking skills of students enrolled in the course. A secondary purpose is to determine if students who have a wide variety of intended majors and are enrolled in the course show an increased appreciation for the beauty and utility of mathematics. We will discuss the development of the course, how it fits Belmont's general education quantitative reasoning learning goals, and the added value to the department that is a result of offering a course in which students develop mathematical thought at a rigorous and challenging level. We will present the design of the study and assessment instruments used, as well as the initial feedback from students, peer tutors, mathematics and computer science majors, and faculty who are involved in the course. (Received September 07, 2005)