A state of crisis exists in developmental education in the state of Georgia. According to USG data, out of more than 37,000 students who entered the system in Fall 2004, 6,627 were required to take developmental mathematics. Of those only 38.9% exited within two semesters. Forty-five percent had not exited by Fall 2006 and were not enrolled at that time. In Fall 2007, a redesign of developmental mathematics at the presenter’s institution resulted in an innovative self-paced course in which technology is used to individualize the mathematical learning of students. The course has resulted in a 49% exit rate with an mean time in the course of 1.6 semesters while raising the college algebra grades of developmental students compared with similar students in the UGG. This proposal presents the model for the course and quantitative data showing it’s effectiveness and offers suggestions on implementing the model at other institutions. (Received August 11, 2011)