Backward design is a method of designing educational curriculum by setting goals before choosing instructional methods and forms of assessment. One of the challenges for developmental math is that there are too many topics to cover within a short period of time. The author argues that a successful developmental math course should be backward designed to promote student mastery of a well-targeted set of topics and skills, and to help students build a sustainable and effective learning practice. The author presents a course he created using the concept, and demonstrates its effectiveness by examining student retention rate in the course and passing rate in the subsequent courses. (Received July 15, 2014)