This talk will trace the evolution of the Senior Seminar course at UALR. The primary goal of the course when it was developed was to provide a venue for the measurement of student outcomes as part of the mathematics assessment program. Student objectives include oral and written communications skills, problem solving skills, cooperative teamwork, and appropriate and correct use of technology. The Senior Seminar is offered at the culmination of the degree program, giving students the opportunity to draw from all of their courses while synthesizing solutions to problems. The presentation will focus on the activities engaged in by students and the ways in which the Senior Seminar course contributes to the assessment of the mathematics degree programs. We will discuss data from the course that is evaluated by the assessment team, and the means by which it is evaluated. (Received October 04, 2004)