Pete Johnson* (johnsonp@easternct.edu), Mathematics and Computer Science Department, Eastern Connecticut State University, 83 Windham St., Willimantic, CT 06226, and Hari P. Koirala. Showcasing students’ mathematical understanding through portfolios: A capstone course for mathematics majors on a secondary teaching track.

At many colleges and universities, a significant number of the mathematics majors are also preservice secondary mathematics teachers. At Eastern Connecticut State University, we have developed a capstone course for mathematics majors who are also preservice teachers of secondary mathematics. This course attempts to provide an answer to a common student question: “What do my undergraduate math courses have to do with teaching high school students?” This course seeks to integrate and deepen students’ knowledge of the undergraduate curriculum and to demonstrate connections between undergraduate and secondary mathematics. The major assignment in the course is a portfolio of students’ work. Through a set of six entries from across the undergraduate curriculum, students demonstrate their understanding of mathematics and show how more advanced content is connected to teaching secondary mathematics. We have also developed and validated a portfolio scoring rubric to assess student mathematical understanding. The data from this assessment are collected every year and used as a major data source for NCATE/NCTM accreditation of our education program. Our presentation will include samples of students’ work and data from students’ scores on these portfolios. (Received August 08, 2011)