

1067-K1-2164      **Benjamin Galluzzo\*** (bjgalluzzo@ship.edu), Department of Mathematics, Shippensburg University, Shippensburg, PA 17257. *Disaster Modeling – Beyond the Numbers*.

Due to the Gulf Oil Spill, the U.S. is facing its largest environmental catastrophe ever. The uncertain future of the region's many coastal ecosystems in addition to the economic impact of successive disasters lends itself to a variety of mathematical modeling problems. Unfortunately, what we are able to learn about the scale and reality of the oil spill and its impact has been minimal; especially when we are often provided with numbers that give us very little insight into their actual meaning. This past fall, over 50 Shippensburg University students majoring in a wide variety of disciplines, traveled to the Mississippi Gulf Coast to see first-hand what had happened and to provide help with ongoing cleanup efforts. The fall mathematical modeling course used the Deepwater Horizon spill as a common theme for class activities and had some members of the class go on the Gulf trip. Upon returning to the classroom, the traveler's reports made many groups rethink and eventually change their models. In this talk, we will discuss the value of qualitative perspective in developing quantitative models in a mathematical modeling class. (Received September 22, 2010)