Mary Lynn Reed* (mlrsma@rit.edu), 2334 Gosnell Hall, 85 Lomb Memorial Drive, Rochester, NY 14623. Emphasizing Communication Skills and Career Perspectives in a Senior Capstone Course in Mathematics.

After spending more than twenty years working as a mathematician and technical leader in government and industry, and overseeing the entire mathematics hiring program at one of the largest employers of mathematicians in the world (the National Security Agency), the author brought a unique "employer-oriented" perspective to the Senior Capstone Course in Mathematics at the Rochester Institute of Technology this past Spring. In this talk we describe how this course was designed and implemented to emphasize knowledge and skills that would be useful to graduating math majors, with a particular focus on written and verbal communication of technical information for a variety of audiences. Assignments included several different styles of oral presentation (including "dry runs" with peer feedback) and the writing of an Executive Summary document. The centerpiece of the course was a Capstone project, independently investigated and developed by students based on their interests. Regular class meetings offered the opportunity for discussion and reflection on topics of relevance to mathematically-focused careers. A focal point for weekly class discussions was Cathy O'Neil's popular book { Weapons of Math Destruction: How Big Data Increases Inequality and Threatens Democracy}. (Received September 04, 2020)