

1135-E5-2543      **Erika L. Ward\*** (eward1@ju.edu). *Are There Enough Sidewalks? A Graph Theory Project for Non-Majors.*

At Jacksonville University, our mathematics for non-majors course asks students to explore mathematical topics that they haven't seen before, with the goal of gaining systematic problem solving skills and understanding ways that mathematics describes the real world. As the capstone to a section about graph theory, students create a graph that represents a portion of campus and the sidewalks that connect the features they've chosen to map. They then use the vocabulary, concepts, and skills they have learned to evaluate whether the sidewalks on campus are sufficient and useful. This modeling project not only helps them see how the mathematics they are learning applies to the world around them, but also helps them to clarify the concepts that they are trying to understand. It also encourages students to incorporate skills and interests from other areas to create maps that are relevant and even beautiful. (Received September 26, 2017)