

1125-G5-2828

Shannon R Lockard* (slockard@bridgew.edu). *Creating and Investigating Classes of Graphs*. Preliminary report.

Due to its visual nature, Graph Theory is an excellent class for students to study classic problems as well as discover their own ideas. In this presentation I will describe a research project assigned in an upper level Graph Theory course. After creating their own infinite graph classes, students further describe their graphs by investigating different parameters discussed in class. Finally, students choose what they feel is interesting about the graph class to present to the class. Over the course of the project, students have the opportunity to create their own unique mathematical objects, strengthen their understanding of course topics, have their own say in what makes interesting mathematics, and usually find out that not all questions have nice, neat answers. This talk will include several examples of student work. (Received September 20, 2016)