1145-E5-2339 Kyle Evans* (kyle.evans@trincoll.edu) and Adam Giambrone (agiambrone@elmira.edu). Mathematics and Fairness: Using Gerrymandering to Connect Mathematics to Sociopolitical Issues.

If we work under the assumption that mathematics cannot be separated from its social and political contexts, then we enter a realm where mathematics becomes a tool for change. Specifically, with recent Supreme Court decisions and the upcoming 2020 U.S. Census, the topics of redistricting and gerrymandering have become increasingly prevalent in political discourse. In this talk, we will discuss ongoing work to connect mathematics to current and relevant sociopolitical issues in undergraduate general education mathematics courses. We will discuss a student project on gerrymandering where students work towards synthesizing numerical information, geometric information, and sociopolitical considerations to construct their own definition of "fairness" with regard to redistricting. We will also discuss ongoing scholarship and plans for future courses and scholarship related to this topic. (Received September 25, 2018)