Yajun An* (yajuna@uw.edu), Alan Bartlett (alanmb@uw.edu), Ryan Card and Haley Skipper. Teaching mathematical paradoxes as a general education course.

The majority of students who take general education courses in mathematics do not experience mathematics beyond the level of college algebra and trigonometry.

In our course “Paradoxes: mathematics of nonsense”, we introduce students to content in logic and set theory, probability and statistics, limits and infinity, graph theory, game theory, topology and geometry. Using paradoxical problems to introduce these topics allow us to de-emphasize quantitative skills in favor of critical thinking, and shows students how formalism is used to simplify problems rather than create them.

We have taught the course seven times and have received overwhelmingly positive reviews from the students, despite that many indicated a negative affect towards mathematics in a precourse survey.

In this talk, we will give an overview of the course, demonstrate pedagogy through example paradoxes, and share student feedback from anonymous course evaluations. (Received August 23, 2018)