Mathematical Perspectives

Two lectures on mathematical aspects of current issues.

October 7th, 8:30pm

Adam Graham-Squire (High Point Univ.):Quantifying Disenfranchisement: The Mathematics of Gerrymandering

Gerrymandering is the act of drawing political district lines to favor a particular race or party. We will discuss what gerrymandering is, do some hands-on gerrymandering of our own, highlight some recent issues with gerrymandering in North Carolina (ground zero for gerrymandering), and look at ways of using math to identify gerrymandering.

October 26th, 7:30pm

Andrea Perreault (UNC Chapel Hill): Interdisciplinary Research in STEM

Science, technology, engineering, and mathematics are often grouped together under the STEM umbrella as the counterpart to the Humanities. But how the concepts in these respective fields overlap with one another isn't always clear. The microscopy images in biology textbooks would not be possible without physics. Data analysis of biological experiments would not be feasible without mathematics and computer science. Each of the STEM fields has unique questions to ask and study, but the intersection of these fields is where we can begin to gain a deeper understanding of the world around us.