

1145-H5-1288      **Jacob Duncan\***, 751 E. Howard St, Winona, MN 55987. *Mathematics for Sustainability*.

Some of the biggest challenges facing humanity today stem from issues surrounding environmental degradation and social injustice, and the need to address the ramifications of these issues from a STEM perspective is greater than ever. This talk centers around the course Mathematics for Sustainability I recently developed at St. Mary's College, Notre Dame and currently teach at Winona State University. This course develops and applies mathematical concepts and tools to quantitatively explore real-world, topical problems pertaining to environmental and social sustainability. Topics are motivated by exciting hands-on experiences – experiments, demonstrations, outdoor data collection excursions – from relevant STEM fields. (Received September 20, 2018)