Aaron D Wangberg* (awangberg@winona.edu), Winona, MN 55987. Unleashing student creativity and mathematics in Math 100: Survey of Mathematics.

Introductory math courses, like Math 100: Survey of Mathematics, often take the viewpoint "Mathematics is all around us" and proceed to show students math topics which they can identify in their lives. The course takes on a very different feel if the term ‘mathematics’ as treated as a verb, or process, rather than as a noun or as a list of content. The former case provides space for students to be creative - to play, make conjectures, engage in discourse, and arrive at justified conclusions or contradictions. As "Mathematics is all around us", this viewpoint provides the flexibility for the instructor to help students extract mathematics from their own lives. in this talk, we will describe how the course structure and activities in Math 100 helped students do mathematics in their lives. The talk will include the innovative, creative final projects generated by students and a short summary of the impact this course had on student perceptions of mathematics. (Received September 17, 2019)