Silvia Saccon* (ssaccon@bard.edu). A search and rescue activity to explore multivariable concepts.

In multivariable calculus, students often encounter difficulties in visualizing functions of two variables and struggle to fully grasp the meaning of level sets. To help students explore concepts in space, we have built three-dimensional surface models, and we have designed mathematical tasks that allow students to engage with calculus ideas through tactile and visual learning experiences. In this talk, we will provide an overview of the project, describe the mathematical tasks and physical manipulatives used in the classroom, and share students’ comments about their experiences. (Received September 25, 2018)