UNIVERSITY OF CALIFORNIA
RIVERSIDE

DEPARTMENT OF MATHEMATICS

COLLOQUIUM

DR. SARA LAPAN
NORTHWESTERN UNIVERSITY

"A SNAPSHOT OF MY TEACHING & RESEARCH"

This talk will be split into two parts: the first will focus on teaching and the second on research.
I am passionate about teaching in a way that engages and educates a wide range of students. I strive to teach concepts and critical thinking skills that students will use in the course and for years to come. In this talk, I will discuss both my teaching experience and philosophy. As an educator, I want to create opportunities for all students to succeed and I do so, in part, through the use of active and collaborative learning. We will discuss a few studies on the use of active and collaborative learning. I will expand upon this philosophy and discuss a few ways of enacting it in the classroom.
My research focus is in the area of holomorphic dynamics — a fascinating area that lies at the intersection of complex analysis and dynamical systems. In pop-culture, it is known for having beautiful fractals, like the Mandelbrot set and Julia sets. The talk will focus on a particularly interesting class of holomorphic maps that fix a point. In dimension one, the Leau-Fatou Flower Theorem provides a beautiful description of the dynamics near a fixed point and serves as inspiration for the study in higher dimensions. In higher dimensions, our picture of the dynamics near a fixed point is still being formed and we will discuss some results that contribute to this picture.

MONDAY, MAY 9TH, 2016
SURGE 284
TEA TIME 3:40 P.M.
TALK BEGINS 4:10 P.M.