# Teaching Statement
## Dan Margalit

I am passionate about teaching and take great pride in it. I've worked with grade schoolers from public and private schools in Chicago and Providence, high school students in Utah, and undergraduate and graduate students at Brown, Chicago, Utah, Tufts, and GaTech.

**Awards and evaluations**. I received the institute-wide Class of 1940 Course Survey Teaching Effectiveness Award at Georgia Tech, the Outstanding Instructorship award at the University of Utah, and the Lawrence and Josephine Graves teaching prize at the University of Chicago. I have received Thank a Teacher certificates almost every year at Georgia Tech. I routinely receive excellent teaching evaluations, typically with over 70% of the students giving me the highest possible overall rating. In my evaluations at Georgia Tech, many students have said that I was the best professor they have had here.

**Undergraduate teaching**. I am dedicated to excellence and innovation in undergraduate education. I introduced the online homework system WeBWork at both Tufts and Georgia Tech. At the University of Utah, I created the Calculus Carnival, and fun and educational event that is still running annually; I published an article about the carnival in MAA's *Focus* magazine. I have designed and taught undergraduate capstone courses in knot theory and in topology. I have experimented with various modes of active learning—including flipped classrooms, online homework, clickers, and just-in-time teaching. I have given many popular talks for undergraduates on the mathematics of juggling. I advised an REU student at Georgia Tech who proved an original theorem on pseudo-Anosov homeomorphisms. As a vehicle for future REU projects, I am co-editing a book called *Office Hours with a Geometric Group Theorist*. I am advising an undergraduate student on a senior project using this book.

**Graduate teaching**. I am equally devoted to developing students at the graduate level. I recently graduated two Ph.D. students, both of whom obtained academic positions, and one of whom solved a well-known conjecture. I have taught several topics courses using one book that I co-authored (*A Primer on Mapping Class Groups*) and another book that I co-translated (*Thurston's Work on Surfaces*). I taught the introductory graduate algebra course at Georgia Tech, as well as topics courses on representation theory, characteristic classes, and 3–manifolds. I recently taught algebraic topology to a group of exchange students from China. I have overseen numerous reading courses, including courses on braids, 4–manifolds, mapping class groups, and geometric group theory. The educational centerpiece of my NSF CAREER award is the Topology Students Workshop, a summer workshop on career development for young topologists. By popular demand, I plan to continue the series. One byproduct of the workshop is a web page, the Topology Students Resource, a popular site for professional development advice (over 1,000 hits).

In my teaching, what I care most about is that my students develop their critical thinking skills, their confidence, and their appreciation for mathematics. I enjoy being a part of this process for my students, from possibly disliking math, to first epiphanies, to mathematical fluency and beyond.