

Statement of Educational Effectiveness for Kenneth M. Golden

My goals include making math interesting, exciting, and easier to relate to, so that the students want to learn more. It is also important that they know that I genuinely want them to succeed.

- **Classes.** Perhaps the most direct evidence of effectiveness at achieving these goals comes from student evaluations in Calculus I this Fall 2020 (taught remotely on zoom) and in Calculus III in Fall 2019. “Professor Golden made the class environment very fun and engaging, making a class such as calculus much easier to understand. He was always available for help, and I could tell he truly wanted each of his students to succeed.” “I love the way Professor connected everything to the real world. It helped what we learned in class feel more important.” “he does a fantastic job of inspiring you to truly want to learn more about the subject.” “I loved Ken and the way he led lecture! Always considerate of students and wanted us to learn and succeed.” “Outstanding professor! His exams covered the most important topics and most relevant to real life scenarios.” “Relating this to various other fields besides math was fantastic and helped see where it would be used which made it easier to learn Going over the research at the end was amazing! Probably the best part of the entire semester in any of my classes.” “he did his best to make sure we were prepared for exams, including doing a several hour review session ... before every exam. This helped me be much more prepared for tests than I would have been studying on my own.” “I loved how the practice tests explicitly noted what concepts and types of problems would be on the actual test. This helped ease my test anxiety a lot.” “he may be the only math teacher that has actually shown me the cool things that you can do if you work hard to pursue a career in mathematics.” “This was the best math class ever, and actually one of the best classes in general.” While I try to be the best teacher I can, there are certainly things to improve on, as noted in student feedback, which I take very seriously. I work with my TAs to help address them. Further evidence of effectiveness is a 2007 U Distinguished Teaching Award and a 1989 Princeton Teaching Award.
- **Mentoring.** While I view the many achievements (publications, lectures, polar expeditions, etc.) of my students and postdocs as evidence of effectiveness, a couple items stand out. Two of my students, Rebecca Hardenbrook (2018) and Delaney Mosier (2020), won the Research Scholar Award, the highest research honor given to an undergraduate in the College of Science. Ph.D. student Ryleigh Moore was one of three American graduate students, and the only math student in the world, invited to participate in the 2019 MOSAiC School during the first leg of the largest Arctic expedition in history. My recent Ph.D. students have been particularly successful on the job market, obtaining postdoctoral positions at top institutions such as Courant Institute NYU and U. Texas Austin. In 2012 I won the Myriad Award in the College of Science for fostering undergraduate research and providing learning experiences for students.
- **Course development.** Please see course evaluations for Math 5750/6880 Mathematics and Climate, Spring 2020, but the following indicates that my efforts at smoothing the abrupt transition to online teaching were effective: “Dr. Golden did a fantastic job teaching in person, inviting discussion, and encouraging further interest in the field. When we had to change to an online format Dr. Golden did a wonderful job transitioning the experience.”
- **ACCESS.** Student feedback from ACCESS in summer 2020 (taught on zoom): “This week was enlightening...led me to consider a double major or minor in math, specifically applied math.” “My favorite things about the math module were Professor Golden’s presentations.” “I really enjoyed being able to do the after sessions with Professor Golden. his session was fun and informative. It helped me solidify my major and my plans for my undergrad.” “My favorite part was learning about how we can apply math to climate change.” “I loved learning about the math in sea ice, and had never considered that sea ice could be so interesting! Overall, while very challenging, this week was fantastic!”
- **Outreach.** My effectiveness at distilling and explaining complex ideas and telling an exciting story about mathematics is evidenced by the numerous high profile opportunities I’ve had to communicate with the public through lectures, presentations, and the media (please see CV).