

## Teaching Philosophy

My teaching is centered around engaging students in active learning. For example, when a student asks me about a problem, I always start by asking what they have tried before giving hints to a solution. Furthermore, instead of asking the entire class for ideas on how to solve a problem, I will often randomly select a specific student and ask for their input. This system has led to students feeling more comfortable with making mistakes (since they see everyone else making mistakes as well), as well as getting everyone to engage with the class (as opposed to just a few participants).

While I believe that encouraging students to engage with my class fosters learning, I also recognize that this can cause anxiety for students, especially for students who are not native English speakers, and for those who come from historically underrepresented groups. Thus it is critical that I establish a safe and friendly environment in the classroom, which I do through a number of techniques. These techniques include learning the names of my students, chatting with them before and after classes, being jovial and upbeat during lectures, and making sure to emphasize that there is no such thing as a “dumb” question. My teaching evaluations suggest that these techniques have been successful: amongst the 94 evaluations I have received from students, over 96% either agreed or strongly agreed with the statements “The Instructional Assistant encouraged students to ask questions and participate in class/section,” and “The Instructional Assistant interacted well with students and treated them with respect and courtesy.”

I am a big proponent of self-improvement, both for myself and my students. On my website, I maintain a list of [strategies](#) that I found to be useful when I was a student. There I also discuss some of my own personal struggles, such as feelings of impostor syndrome, which I hope resonates with students who are facing similar challenges. One practice I use for myself is to enroll as a student in extracurricular activities (e.g. dance or martial arts classes). This gives me a chance to see various styles of teaching, and it also helps me remember the feeling of being a student trying to learn a new skill for the first time. I am always looking to better myself, both in my teaching and as a human being, and it is my hope that I pass on this drive to my students as well.

Throughout my career, I have received overwhelming amounts of guidance and support from a wide variety of mentors. As a teacher, I hope to play a similar role in the lives of my students. For four years I served as a mentor for incoming graduate students at UC San Diego. I volunteered as a mentor for the UC San Diego GradAMP program, where I assisted three undergraduate students in applying to graduate school. Later this year I will be a mentor for UC San Diego’s Association for Women in Mathematics chapter. I proposed and led research projects for two workshops aimed at young mathematicians: the Graduate Research Workshop in Combinatorics, and an AMS Mathematical Research Communities program. I am very interested in working on similar projects with students in the coming years.

# Teaching Experience

I have been a teaching assistant at UC San Diego for six classes. In my spare time, I have started writing lecture notes for a hypothetical graduate course in extremal combinatorics. I helped organize a bootcamp to help prepare incoming graduate students in algebra and analysis, and I organized two reading courses for the Graduate Student Combinatorics Seminar at UC San Diego. I have given a number of expository math talks through the graduate student seminars that I co-organize, which has ultimately made me a better lecturer.

Below are some specific comments I have received from past teaching evaluations. Full evaluations from all of my courses can be found on my [website](#).

- This discussion section was integral in helping me understand the material presented in class. This class is very difficult, but Sam broke down the concepts and made sure all students understood how to solve the problems rather than just solving the problems and expecting the students to know what he meant. He never gave answers to questions without making them first try and offer their own approaches and solutions—which definitely helped me with the hardest part of the course which is just thinking about combinatorial approaches to solving problems. Probably the most helpful discussion leader I’ve encountered in the Math department so far. Thanks Sam! (Combinatorics)
- Sam is an awesome TA. He did a good job of including every student in discussion and making sure we understood the material. He would actively check to see if we were following his explanations, and if we seemed confused he would go back and ask us questions about what we were stuck on, and re-explain the problems until we understood it. I rarely have TAs who do this, and I really appreciate that he cared, instead of just lecturing us. He also made a point of learning everyone’s names which was nice. (Complex analysis)
- Sam was an AMAZING TA this quarter!! He teaches the material incredibly well and his discussions are actually a lot of fun! I have friends assigned to different sections that attended Sam’s discussions instead (one friend from a different TEACHER attended Sam’s discussions) because he helps his students understand the material so incredibly well. Best TA I’ve ever had!! (Calculus 3)