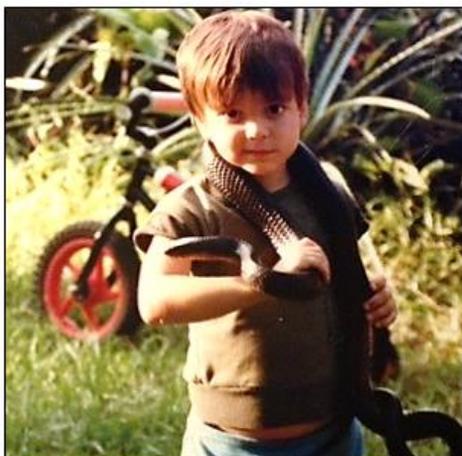


Get to Know the Math Faculty: A.J. Stewart

Part of a series of Math faculty profiles



Where did you grow up?

I grew up in Florida, mostly in the central Florida/Orlando area. When I was younger, we lived in Cocoa, across the Indian River Lagoon from Cocoa Beach. Cocoa is all about pine trees and pickup trucks (as opposed to surfers and sand). One of my first memories is of helping out with the birth of a horse in our stable. Other than that, most of my time was spent fishing or playing in the woods catching frogs and snakes.

When and how did you first become interested in math?

My dream as a kid was to be a zoologist, like Steve Irwin or Jack Hanna. However, I was always good at math. I was always voted in to be the treasurer in school clubs. I remember playing around on my dad's calculator while he taught me trig, when I was still in elementary school. But I was resistant to doing anything with math, because I thought that it was just solving equations. My dad is an environmental engineer and talked about math as some necessary tool—something that wasn't very interesting in its own right. I didn't think that there was any room for creativity or new ideas in math. That changed in college.

Where did you go to college and what was your major?

I first started school in Orlando at Valencia Community College (now Valencia College). At the time, Valencia was my only real option because I barely graduated from high school (it helps when you actually show up to class). I originally thought I would be a cultural anthropologist. But after performing well in a math class, I became a learning assistant for a professor, (now Dr.) Julie Phelps. At the time, she was getting her doctorate in math education and was studying how supplemental instructors can benefit students. She would always urge me to take more math. Eventually I had an extra elective and took a class she suggested called *Logic and Proof in Mathematics*. After that I was hooked and changed my major to math. I finished my bachelor's degree in mathematics at Humboldt State University. I had always wanted to live in California, and HSU is a relatively small, liberal arts school nestled in the middle of the redwoods, near the Oregon border. It was the opposite of Orlando, so it was perfect. I had some really supportive instructors during my time there. After a colloquium talk that he gave, a visiting faculty member from University of Oregon, Dr. Brad Shelton, suggested that I apply to the Ph.D. program at U of O, which I did.

If you are not from Seattle, when and why did you come here?

I moved to Seattle in 2014, when I finished graduate school and accepted a teaching position at Seattle U. I was drawn to SU by the values of a Jesuit education and a student-focused approach to teaching. I initially thought I wanted to become a hardcore research mathematician, but the pace of grad school was exhausting.

The research I was doing was quite demanding and I wanted a more balanced career. I realized I took more satisfaction from projects that involved supporting students in their math learning process. I had sworn I would never move north of Oregon, because I love warm weather, but here I am. I really enjoy it.

What is your favorite class to teach and why?

I like teaching *Elements of Calculus for Business* and *Probability & Statistics for Sciences & Engineering*, because they let me connect mathematics to the real world. These classes are required courses for majors outside the math department, so I think the students don't expect much. But using math to highlight income inequality or to do hypothesis tests about over-policing in Seattle, really lets me present math as something that can have a significant impact in the real world. Being part of the students' process of realizing how they can use math in their subject area of interest is pretty amazing!

What is the most exciting math project you've ever been involved with?

I would say this would have to be my time in Utah learning about algebraic statistics. The applied algebraic geometry community is so much more supportive than the abstract side. It really changed my whole life. Being able to use all the abstract concepts to say something about the real world is something I didn't think possible. It also taught me a lot about computational algebraic geometry. I've since grown to love algorithms and coding. Shout-out to Dr. Elizabeth Gross for being the best mentor during my transition away from abstract algebraic geometry.

What is your favorite pastime, other than math?

I love being outdoors. Just being in the woods and hiking is great. Being on the water reminds me of my childhood. Anything outside really. Last summer I climbed the Three Sisters mountains in Oregon in three days. I like pushing myself to see what I am able to accomplish.

What is your most prized possession?

This is a tough question for me. We moved around a lot when I was growing up, and my older brothers always stole my toys, so I learned not to get too attached to things. I do like to keep mugs from the conferences I attend though. The ICERM (Institute for Computational and Experimental Research in Mathematics) is one of my favorites.

If you could give college students one piece of advice for success in school, what would it be?

Struggle is part of the learning process. You are smarter and more capable than you've imagined. When things get difficult, recognize that you are learning and growing towards the person you desire to be. Push through and dream big!

If you could give college students one piece of advice for success in life, what would it be?

The narrative that you have in your head is a mixture of all the voices you have heard throughout your own life--some of them are kind and some of them not so kind. Try to focus on those loving and kind voices.

Anything else we should know about you?

Currently I am living in Covington, Louisiana, with my partner's family and taking care of her uncle's dog. It has been a challenge to teach from so far away, but I believe that connection and community encompass more than just a physical presence. My time here has really highlighted that.