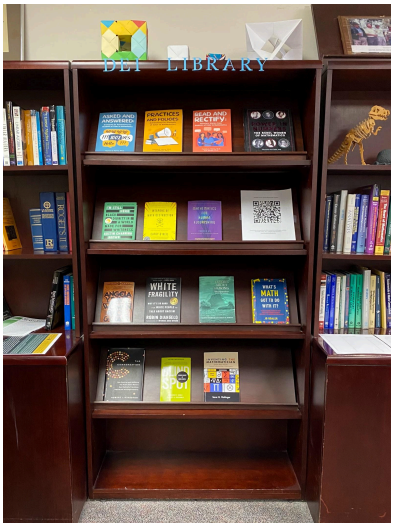
Diversity Statement

"You're pretty good at math…for a girl." Comments like these haunt mathematics classrooms throughout every educational stage. Despite being someone who finds solace in the world of mathematics, that welcoming environment is often threatened by these backhanded compliments which, at their core, question my place as part of the mathematical community. Because I know I am not alone in these experiences, I make a commitment to a lifetime of educating myself and others about diversity, equity, and inclusion, learning when to use my voice and when to listen.



I believe it is our responsibility to educate ourselves on the adversities of other people in order to best aid in overcoming them. In Fall 2021, as the graduate student representative of the mathematics department's DEI Committee, I established a library of resources, both physical and online. Covering topics such as race, gender, and socioeconomic status, both in and out of academia, these books, articles, and videos are intended to remove the barrier-to-entry for members of the department to educate themselves about societal injustices and the impact they may have on students. The physical library is pictured here while the online library can be found at https://sites.google.com/view/ukymathdeicommittee/resources. I remain the contact for the DEI Library and, thanks to contributions from the department, it continues to grow.

Also in Fall 2021, I joined a team of three other graduate students to form the University of Kentucky chapter of Spectra, an organization committed to the support of LGBTQ+ mathematicians and allies. Despite being an organization intended for graduate students, Spectra received overwhelming support from the department as a whole. During the 2021 - 2022 school year, we hosted a number of social events, such as a *gay*me ("game") night and bowling, to foster community amongst the graduate students. We also invited our first speaker, Dr. Rachelle Bouchet from Berea College, whose experience as a LGBT academic has gained national news coverage. In an event open to the entire department, Dr. Bouchet first gave a talk telling her personal experience of being an LGBT educator and researcher, followed by a typical talk on her research in algebra and combinatorics. This year, I am supporting the chapter by aiding the current officers in the planning and NSF grant proposal writing for a weekend-long conference, currently scheduled for May 2023.

While my DEI practices are reflected throughout my teaching and classroom conduct, I believe efforts are best demonstrated through my instruction of the Corequisite for MA 109: *College Algebra*. For this class, students are still officially registered for MA 109, but the corequisite section of the course adds an additional credit hour and allows students who would not qualify by usual placement standards to take *College Algebra*. The students registered for the corequisite meet with an instructor five times per week rather than the usual three. With this extra time, the class is able to get through all the usual *College Algebra* material at a slower pace and with more background math instruction to help aid in understanding. In Fall 2020, I was asked to co-teach the inaugural section of the course. Over the past two years, I have

watched the corequisite program evolve and strengthen and, for Fall 2022, was asked to be the first instructor to solo-teach a section of the course. While I always aim to make my classroom a welcoming, judgment-free environment, the need for this is magnified in the corequisite course; these are students who typically have an unpleasant history with mathematics and who, from day one, don't believe themselves to be someone who can "do math." I attempt to combat this mindset in two ways: 1.) throughout the semester, I reiterate that I have no expectations for them to arrive to every class and be "perfect" every day – life and learning are sometimes challenging, but they belong in the room regardless of what they bring with them and 2.) when possible, I choose a grading method that prioritizes growth and flexible learning timelines – I care much more that they conclude the semester having learned the material rather than demonstrate mastery at an artificial checkpoint. Because of these efforts and the efforts of my colleagues, the *College Algebra* corequisite program has similar pass rates to the traditional sections of the course.

It is a common exercise to have children close their eyes as you prompt them: "picture a mathematician. What do they look like?" They often describe the Albert Einstein type, an older caucasian man with erratic gray hair wearing glasses and a tweed jacket. While I may not be able to influence the mental pictures of young children, I hope that my efforts in diversity, equity, and inclusion will allow for a young woman of color to close her eyes and, when picturing a mathematician, seeing someone like herself. In the future, I look forward to joining the efforts at an institution that values continual education of DEI best practices and that is equally committed to making every student feel like they too are capable of doing mathematics.