

Juliette Bruce's Professional Qualifications

I. Introduction. I have been working with college math students in various roles for over 10 years, and have taught a variety of college mathematics courses including algebra, statistics, probability, pre-calculus, calculus, business calculus, and a variety of support courses for underserved students. During this time I've developed a passion and love of working with and supporting students, especially students from diverse backgrounds. My goal as an educator is to be an active guide for students, providing them with environments where they feel supported and encouraged to let their own mathematical and quantitative curiosities guide how they engage and learn. By taking this approach, I hope to engage with students as the complete people that they are, asking them to bring all of their experiences, backgrounds, identities, and knowledge into the learning environment. I want students to experience mathematics in a humanistic way, seeing how mathematics and quantitative thinking are integral aspects of their lives. As one of my former students noted, "Juliette obviously wants us to succeed not only in math but in life." Recognizing that learning mathematics is not necessarily confined to the classroom I have sought out new and non-traditional teaching opportunities. My teaching has been recognized through both awards and student evaluations:

- In 2018, I was one of three graduate students recognized campus-wide with the Teaching Assistant Award for Exceptional Service.
- I received two TA awards from the math department, the TA Service Award (2018) and the Capstone Teaching Award (2019), the latter of which is awarded to just one teaching assistant each year, for an exceptional record of teaching excellence and service.
- My student evaluations are generally quite high; for instance, for one course 100% of students agreed that I was an effective teacher.

I have sought to develop and refine my skills as an educator, both by viewing each teaching assignment as my own opportunity for growth and learning and by actively seeking out learning from other educators and education experts. In particular, I have implemented evidence-based techniques to support and engage students from diverse backgrounds

II. Courses. I feel highly qualified to teach most lower-division mathematics and statistics courses. In particular, through my coursework and research or my Ph.D. in mathematics I feel I have deep and strong understanding and foundation to the material in most lower-division mathematics and statistics courses. Further, I have experience teaching and tutoring many of these courses including algebra, pre-calculus, calculus, linear algebra, and probability/statistics. For example, I would be confident and excited to teach any of the following courses: Math 1, Math 10, Math 12, Math 14, Math 18A/W/B, Math 19, Math 30, Math 31, Math 32, Math 33, Math 39, Math 42, Math 70, Math 71, Math 102, Math 105, Math 106, Math 108, Math 112, Math 115, and Math 126. This is a non-comprehensive list and there are many other courses I would be excited to teach. Math As much of my work focused in pure mathematics I feel less qualified to teach more applied courses, but I would be happy to work hard to teach these courses if needed. For example, some courses I feel less to teach are: Math 42, Math 50, and Math 143C/M.