

The Mathematical Association of America New Jersey Section Award for Distinguished College or University Teaching of Mathematics

In 1991 the Mathematical Association of America instituted Awards for Distinguished College or University Teaching of Mathematics in order to honor college or university teachers who have been widely recognized as extraordinarily successful, and whose teaching effectiveness has been shown to have had influence beyond their own institutions.

Dr. Grace Cook

The New Jersey Section of the Mathematical Association of America is pleased to present its 2022 sectional award for Distinguished College or University Teaching of Mathematics to Dr. Grace Cook of Bloomfield College.



Dr. Cook is an Assistant Professor of Mathematics at Bloomfield College, where she has helped teach, coordinate, develop and support the mathematics program since 2013. She has proven to be a highly effective mathematics educator. She holds a Master of Science in Applied Mathematics degree from Stevens Institute of Technology and a Doctor of Philosophy in Education from Walden University. Moreover, she holds a NJ Department of Education Teacher of Mathematics Highly Qualified Teacher certification.

She has taught throughout the mathematics curriculum and is often cited as being extremely effective for non-mathematics majors in the general education courses. Her colleagues and students repeatedly described her ability to teach to the whole student rather than just teaching mathematics or academic skills, which leads to far greater outcomes than just test scores. She brings a positivity and enthusiasm to all that she does, including her teaching, which can be felt by all who know her. This is routinely expressed by her colleagues and students. Students typically wrote about Dr. Cook's positive characteristics, for example "The way she was enthusiastic about the class and helped us with anything we needed." One of her colleagues describes Dr. Cook as:

"She is intelligent, thoughtful, creative, enthusiastic, dedicated, organized, reliable, cheerful, and incredibly hard working. She is always giving with her time, and knows exactly how to motivate those around her. The words no or I can't do not exist in her vocabulary. She knows precisely when a student needs to be nurtured, and even more importantly she knows how to empower her students to be successful: Grace is one of the best educators I have ever met, but more importantly, she is one of the best individuals I have ever met."

Dr. Cook contributions to the curricular development at Bloomfield College within and beyond the mathematics curriculum. She is the mathematics coordinator and the coordinator of First-Year Mathematics. In these roles, she must adapt the curriculum to the needs of the students. A colleague describes Dr. Cook's contributions to student development through the curriculum as:

"In the time she has been at Bloomfield, she has been the definition of a team player. She is energetic, committed, and willing to work with other departments to further our common educational goals. She has done a wonderful job with the freshman level program. She has made changes as the program evolves to meet student needs. Grace has

coordinated our summer program for freshmen. This unique program provides an introduction to college work and gives students an opportunity to meet the needs of the first mathematics course prior to the beginning of their freshman year.”

Additionally, the Education Division asked her to help improve pass rates for the Praxis exams, which have a large mathematics portion. She helped develop content to be added to the education program to help students succeed. Consequently, a colleague noted that “student pass rates for this portion of the exam have greatly improved.”

Dr. Cook also established a peer-tutoring program at Bloomfield College. She recruits upper-level students to be peer-tutors to help first-year students through their mathematics courses. The upper-level students are selected, because they have demonstrated success in mathematics. So, the tutors are not just mathematics majors. It was noted that “This program has been successful, not only for the first-year students who are helped, but also for the tutors themselves.” Overseeing this program provides an additional opportunity for Dr. Cook to help educate the whole person while supporting the specific academic needs of first-year students.

Dr. Cook shares her teaching practices (successes and not-as-successful attempts) with the mathematics community, particularly at the MAA-NJ Section meetings and MAA MathFest. Her talks at the Section meetings include *Working with Work Study: Research Adventures in a Liberal Arts Setting*, *A Graphical Forest*, and *Assessing Outside of the Box in Discrete Math*. She also contributes to table discussions, including those that impact NJ such as *Retaining Students in Mathematics*, *The Common Core and its Implications for Higher Ed Mathematics*, *The State of Teacher Preparation in New Jersey*, and *The Future of the Section*. In other venues, she has given talks and posters on *Adventures in Online Teaching with First Year Students*, *Careers in Mathematics*, *Online Math with OER*, *Surviving the Apocalypse with a Compass and Straightedge*, and *Hits and Misses While Preparing Students for Calculus and Physics*. She is known throughout the Section as an effective online educator and helped organize several contributed paper sessions about online teaching to support her NJ Section colleagues during the pandemic, as many of us transitioned to teaching virtually.

Dr. Cook also serves as the Social Media Coordinator for the Section, where she shares her energy, enthusiasm, and positivity as the “face” of the Section. You should follow the Section on Facebook, Instagram, and/or Twitter to see more of her work.

Dr. Debra Curtis (Professor of Mathematics), Dr. Brandon D. Fralix (Associate Professor of English), Dr. James Murphy (Professor of Biology), and Kevin Kline (Adjunct Professor of Mathematics), Bloomfield College, nominated Dr. Grace Cook for this Distinguished Teaching Award.

Response from Dr. Cook

I can't begin to express my gratitude to my colleagues at Bloomfield who nominated me for this award and for the selection committee for choosing me. I'd like to send a big thanks to Debra Curtis, Kevin Kline, Jim Murphy, and Brandon Fralix for their belief and support of me and what I do at Bloomfield. We are small but mighty over here in the math department, and our number one priority is the students. They are truly amazing, and I'm honored to be able to work with them every day.

I'd like to thank some key individuals who were very influential in my decision to study mathematics and to pursue a career in teaching:

- Mr. Hicks, my 8th grade Algebra teacher, who showed me how amazing mathematics could be
- Dr. Milos Dostal, my advisor at Stevens, who was an incredible mentor
- Dr. Cheryl Keen, my guiding light at Walden during my extremely long PhD journey
- My parents and step-parents for always supporting my education path no matter where it lead

I'm also honored to see that Dr. Roger Pinkham, another of my Stevens professors, has previously won this award. I have very fond memories of his class.

Finally, I'd like to thank my husband who has to deal with me putting in long hours for grading and class preparation and making so, so , so many videos in the craft room. Without his support, I wouldn't be able to be the teacher that I am.

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