MELISSA BEERBOWER

Milwaukee, WI \diamond beerbow2@uwm.edu

EDUCATION

University of Wisconsin-Milwaukee

MS in Mathematics expected December 2026

Loyola University Chicago

BS in Mathematics, Summa Cum Laude, Departmental Honors

December 2024

- o Interdisciplinary Honors Program
- o Minors in Arabic Language and Culture, Islamic World Studies

RESEARCH

Researcher, NSF Combinatorics REU in Ponce, PR

Summer 2024

- Participated in two combinatorial projects, full time for 9 weeks.
- Researched lucky polynomials for subsets of Fubini rankings.
- Researched Inversion Tables and Sequences as parking functions.
- Gave two presentations on each research project.
- Attended professional development sessions on graduate school applications, mathematics conferences, CV writing, professional website creation, and graduate research opportunities.

PUBLICATIONS

o On the Lucky Statistic and the Lucky Sets of Fubini Rankings, In progress.

Melissa Beerbower, Jennifer Elder, Pamela E. Harris, Lucy Martinez, Grant Shirley. In progress.

o Inversion Tables as Parking Functions, In progress.

Melissa Beerbower, Jennifer Elder, Pamela E. Harris, Ilana Lavene, Lucy Martinez, Adam Martinsen, Molly Oldham.

- \circ A Day in the Life of Marielle Gardner at Desmos, Math Horizons Volume 33, issue 1 September 2025 Page 22
- o Graduate Student Reflections on Mentoring Undergraduate Researchers in Mathematics, Journal of Humanistic Mathematics. Under review.

Melissa Beerbower, Jillian Cervantes, Kim Harry, Matt McClinton

TEACHING EXPERIENCE

Graduate Teaching Assistant, University of Wisconsin-Milwaukee

Spring 2025-present

- Math 103: Contemporary Applications of Mathematics (Fall 2025); three discussion sections.
- o Math 105: Introduction to College Algebra (Spring 2025); one lecture section.
- o Math Tutor at Drop-in Tutoring Center (Spring 2025); 10 hours a week.

Private Tutor,

August 2025-present

- Tutor middle schooler twice a week in an accelerated (high school) math class.
- Prepare quizzes to begin each session.
- Teach test taking strategies.

Tutor, Veterans Upward Bound, UWM Trio Program

Summer 2025

- Give lessons to supplement ALEKS.
- \circ Prepare veterans for Math 105 or 115
- Four hours of small-group tutoring a week.

Mentor, Graph Enumeration and Mathematical Sciences Undergraduate Program

- Led professional development workshops on writing abstracts, introductions, and bibliographies.
- Provided meticulous one-on-one feedback to mentees on their definitions and proofs.

Supplementary Instructor, Loyola University Chicago

Fall 2024

June 2025

- Supplement instruction for MATH 131, Applied Calculus I.
- Attend class with enrolled students.
- o Confer with professor, Dr. Alan Saleski, each week.
- Prepare materials, including exercises for sessions.
- Host three sessions each week; two in person and one via Zoom.

Tutor, Achieving College Excellence

Spring and Fall 2024

- o Provide 5-6 hrs/wk one-to-one tutoring for first-generation and low-income students.
- Attend professional development workshops on topics including gender identity and neurodivergence.
- Tutor precalculus, applied calculus, introductory statistics, logic, study strategies.

Grader, Loyola University Chicago

Fall 2023

- o Graded MATH 212: Linear Algebra homework every two weeks.
- o Worked under supervision of Dr. Rafael González d'Léon to learn best practices to use grading and notes to support learning.

Engaged Learning Student, ENGL 220: Theory and Practice of Writing Tutoring

Fall 2023

- Nominated by professor of Sufi Literature for writing and interpersonal skills.
- Worked 16 hours in the university's Writing Center.
- o Attended professional development workshops on accessibility, neurodivergence, and written feedback.
- \circ Conducted research project on how the Writing Center could collaborate with STEM departments and presented it to STEM faculty and the WC Instructional Director leading to an initiative to place writing fellows in critical STEM classes.

AWARDS AND HONORS

 \circ Osher Lifelong Learning Institute Scholar Fellowship, (\$1,500)

Spring 2026.

Inaugural scholar in program funding graduate students to teach a class related to their research to retirees.

• National Science Foundation Graduate Research Fellowship, Honorable Mention

Spring 2025

- o Waldemar J. Trjitzinsky Memorial Award, American Mathematical Society (\$3,000) Summer 2024
- REU in Ponce, Puerto Rico, National Science Foundation (\$5,400)
- Philipp Endowed Scholarship (\$2,070)

Fall 2023

• Rataj Endowed Scholarship (\$3,000)

Fall 2023

o Dean's List

6 of 9 semesters

• Damen Scholarship (\$86,000)

Fall 2016 - Spring 2018, Fall 2022 - Spring 2024

SERVICE

- \circ Provided customized high dosage tutoring in literacy and arithmetic for refugee students with limited or interrupted formal education.
- \circ Synthesized working on student's current high school courses with creating a solid foundation in arithmetic and phonics.
- Created math worksheets tailored to student.
- Used Arabic language skills to improve understanding with Pashto-speaking students.
- o Received Bronze Presidential Volunteer Service Award for 182 hours of work at FORA.

SKILLS

Spanish, intermediate
LaTeX, advanced