

MELISSA BEERBOWER

Chicago, IL ♦ mbeerbower@luc.edu

EDUCATION

Loyola University Chicago

BS in Mathematics/MS in Mathematics

anticipated December 2024/December 2025

- Relevant Coursework: Combinatorics, Real Analysis, and Topology
- Graduate Coursework: Advanced Topics in Abstract Algebra, Mathematical Logic, Complex Analysis
- Presentations: Latin Squares, Wallpapers, Modules
- Interdisciplinary Honors Program
- 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

- *On the Lucky Statistic of Fubini Rankings and Subsets of Fubini Rankings*, with Jennifer Elder, Pamela E. Harris, Lucy Martinez, Grant Shirley. In progress.

TEACHING EXPERIENCE

Supplementary Instructor, Loyola University Chicago

Fall 2024

- Supplement instruction for MATH 131, Applied Calculus I.
- Attend class with enrolled students.
- 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

- 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

- Graded MATH 212: Linear Algebra homework every two weeks.
- Worked under supervision of Dr. Rafael González d'León 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.
- Attended professional development workshops on accessibility, neurodivergence, and written feedback.
- 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

◦ Damen Scholarship (\$86,000)	<i>Fall 2016 - Spring 2018, Fall 2022 - Spring 2024</i>
◦ Phillips Endowed Scholarship (\$2,070)	<i>Fall 2023</i>
◦ Rataj Endowed Scholarship (\$3,000)	<i>Fall 2023</i>
◦ REU in Ponce, Puerto Rico, National Science Foundation (\$5,400)	<i>Summer 2024</i>
◦ Waldemar J. Trjitzinsky Memorial Award, American Mathematical Society (\$3,000)	<i>Summer 2024</i>
◦ Dean’s List	<i>6 of 9 semesters</i>

SERVICE

Tutor, Forging Opportunities for Refugees in America *Summer 2023*

- Provided customized high dosage tutoring in literacy and arithmetic for refugee students with limited or interrupted formal education.
- 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.
- Received Bronze Presidential Volunteer Service Award for 182 hours of work at FORA.

SKILLS

Spanish, intermediate
LaTeX, intermediate
Mathcha, beginner