Logan Greenland - She/They

logan.greenland@txstate.edu

EDUCATION

Texas State University, San Marcos, Texas, Expected Graduation: May 2027
Master of Science in Mathematics

- Thesis Track; Advisor: Dr. Christine Lee
- Current GPA: 4.0

Texas State University, San Marcos, Texas, December 2024
Bachelor of Science in Mathematics

- Minor in Music
- GPA: 4.0

RESEARCH EXPERIENCE

Graduate Research Assistant in Quantum Topology - Spring 2026-Present

Logic@TXST Fellowship - Spring 2025-Present
An RA position in the Logic@TXST program run by Dr. Will Boney. Specifically I have worked in Category Theory and Categorical Logic.

University of Texas at Austin Directed Reading Program - Summer 2024
Worked with a graduate student mentor to do readings in Category Theory, ultimately culminating in a presentation on selected subjects.

TEACHING EXPERIENCE

Graduate Teaching Assistqant - August 2026-Present
Instructor of Record for the following courses:

- MATH 1316 - Survery of Contemporary Mathematics

Graduate Instructional Assistant - January 2025-May 2026
Ran two Calculus labs each semester; Calculus II in Spring 2025 and Calculus I in Fall 2025. This involved creating lab assignments and quizzes and holding office hours, but in addition, parctipated in the Calculus teaching forums and helped develop a series and an integration "boot camp" to help students get ready for exams in Calculus II.

Calculus II Undergraduate Teaching Assistant - January 2024-December 2024
Ran a Calculus II lab online in Spring 2024 and in-person in Fall 2024 involving creating lab assignments and quizzes and holding office hours to enrich students understanding of course material from lecture.

MathCATS Tutor - August 2024-December 2024
Tutored students in various math subjects including College Algebra, Calculus, Analysis, and Group Theory through the Math department's tutoring center.

TXST Mathworks Fellow - Summer 2024
Participated in the Junior Summer Math Camp as a Fellow, where I worked with middle school students teaching them Set Theory. Participated in research studies facilitated by the TXST Mathematics education faculty, where we discussed how students learning was going day to day.

PRESENTATIONS

"A Foray Into Topological Quantum Field Theories"
An introductory talk about topological quantum field theories, including some history and applications, with a specific focus on classification results and how they are applied to quantum link invariants. Given at the Summer Math in San Marcos Conference on June 28, 2026.

"Presenting Compact Hausdorff Spaces via The Ultrafilter Monad"
Discussion of Monads and the canonical presentations of algebras over them, specifically focusing on how the category of compact Hausdorff spaces is equivalent to the category of algebras over the ultrafilter monad. Given at the Texas State University Topology Seminar on October 10, 2025.

"Presentations of Algebras on the Ultrafilter Monad"
Lightning Talk Given at The Mid-Atlantic Mathematical Logic Seminar held at Rutgers University September 26-28, 2025.

"Pitch-Set Theory: Music With a Mathematical Twist"
An explanation of mathematical methods used in modern music theory including Neo-Riemannian theory and how it works with groups and Serialism, working in mod 12 arithmetic. Given in the TalkMath2Me Student Seminar at Texas State on February 14, 2025.

"Connecting Categorical and Topological Limits"
A discussion of the categorical notion of a limit and how it shows up in the context of topology, helping to bridge the common name. Given at the conclusion of the UT DRP on July 15, 2024, in the TalkMath2Me Student Seminar at Texas State on September 13, 2024 and at the 2024 Texas Undergraduate Mathematics Conference on November 9, 2024.

"The Math Isn't Mathing!"
A talk about key strategies for test taking and problem solving, especially in the context of Calculus II and Introduction to Advanced Mathematics. Given at the TalkMath2Me Student Seminar at Texas State on April 26, 2024.

SERVICE

Cohomology Learning Seminar - Organizer Fall 2026
TalkMath2Me Student Seminar - Organizer Fall 2024-Present
Texas State Directed Reading Program - Organizer and Mentor Fall 2025-Present

HONORS AND AWARDS

Denison-Koehn Endowed Scholarship in Science - Awarded April 2026
Graduate Teaching Excellence Award - Awarded December 2025
Lynn Tulloch Math Scholarship - Awarded April 2024
President's Honor Scholarship - Awarded Fall 2022-Fall 2024
Chartwell's Undergraduate Scholarship - Awarded Fall 2022-Fall 2024
Dean's List - Awarded Fall 2022-Fall 2024
Outstanding Math Undergraduate Award - Awarded April 2023 and April 2024

ORGANIZATIONS AND MEMBERSHIPS

Texas State Directed Reading Program - Fall 2025-Present
Pi Mu Epsilon - Fall 2023-Present
Served as Vice-President Fall 2024-Present
SUPER in Math - Spring 2024-Present
Mentee from Spring 2024-Fall 2024, mentor from Spring 2025-Present, and Vice-President Fall 2026-Present
Texas State Problem Solvers - Fall 2024-Present
Association for Women in Mathematics - Fall 2024-Present
Served as Vice-President Fall 2026-Present
Texas State Math Club - Spring 2024-Fall 2024
Served as Vice-President Fall 2024