

Audriana Pohlman

Curriculum Vitae

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DOB: August 31, 2000

Education

2021– Exp. **University of Notre Dame, Notre Dame,**
2026 *Doctorates of Philosophy, Mathematics.*

2020–2021 **Texas State University, San Marcos,**
Masters of Science, Mathematics.

Achievements

Summer 2021 **Gowens Merit Fellowship, Texas State University.**

The Graduate College's Gowens Merit Fellowships are prestigious awards intended for use in recruiting students of the highest quality to Texas State University.

Spring 2020 **R. H. Bing Award, Texas State University.**

This award is presented to undergraduate mathematics majors on the basis of academic merit, leadership, and intellectual promise.

Spring 2020, **Dean's List, Texas State University.**

Fall 2019, The Dean's List honors outstanding academic achievement by undergraduate students, students must earn
Spring 2019, at least a 3.5GPA at the end of any Fall or Spring semester in order to receive this distinction.
Fall 2018

Masters Thesis

Title *Orbit Sizes and the Central Product Group*

Supervisors Dr. Thomas Keller

Abstract Let G be a finite nonabelian solvable group and V a finite faithful irreducible G -module. Suppose that $M = |G/G'|$ is the largest orbit size of G on V and that there are exactly three orbits of size M on V . Then $G = D_8 \circ C_4$, the central product of the dihedral group of order 8 and the cyclic group of order 4, and $V = V(2, 5)$, the vector space of rank 2 over the finite field of 5 elements.

Published January 10th, 2022 in Annali di Matematica Pura ed Applicata

Presentations

September **Topology on Finite Graphs Following Stallings, Andy Putman Reading Seminar.**
2022

July 2022 **Introduction to Mapping Class Groups, Ross Mathematics Program.**

July 2022 **Introduction to Knot Theory and Reidemeister Moves, Ross Mathematics Program.**

June 2022 **The Fundamental Group, Ross Mathematics Program.**

June 2022 **Building Topological Spaces, Ross Mathematics Program.**

June 2022 **How to Write a Proof, Ross Mathematics Program.**

June 2022 **General Topology Part 2, Ross Mathematics Program.**

June 2022 **General Topology Part 1, Ross Mathematics Program.**

August 2021 **Scissors Congruence, Ross Mathematics Program.**

July 2021 **The Fundamental Group, Ross Mathematics Program.**

- July 2021 **Building Topological Spaces**, *Ross Mathematics Program*.
 July 2021 **Introduction to Knot Theory**, *Ross Mathematics Program*.
 July 2021 **Orbit Sizes and the Central Product Group**, *Ross Mathematics Program*.
 May 2020 **Computing K_0 of a PID**, *Texas State University's Topology Seminar*.

Work Experience

- Aug. 2021 – **Graduate Assistantship**,
 Present UNIVERSITY OF NOTRE DAME - MATH DEPARTMENT, Notre Dame, Indiana.
 Teaching assistantships are awarded to students who, in furtherance of the University's academic mission as well as part of their own academic requirements and training, perform duties ranging from reading and grading assignments to running discussion sections or labs, or teaching sections of undergraduate courses.
- June 2022 – **Ross Mathematics Program Counselor**,
 Aug. 2022, ROSS MATHEMATICS PROGRAM, Columbus, Ohio.
 June 2021 – Counselors are role models for the younger students. Each counselor leads daily Zoom meetings with a group of 6 students, and evaluates (grades) the mathematical work they submit, providing gentle hints and advice to help inspire students to focus on their math problems. Counselors also participate in one or two math courses at more advanced levels, and are also encouraged to organize and present their own Zoom lectures on mathematical topics of interest.
- Aug. 2020 – **Graduate Instructional Assistant**,
 May 2021 TEXAS STATE UNIVERSITY - MATH DEPARTMENT, San Marcos , Texas.
 Instruct Calculus II Lab (2472) of 40 students twice a week, create and distribute daily assignments, report grades back to students and instructor of record.
- Jan. 2019 – **MathCATS Tutor**,
 Aug. 2020 TEXAS STATE UNIVERSITY - MATHCATS, San Marcos, Texas.
 Tutored college math courses; College Algebra (1315), PreCalculus-Calculus III (2417, 2471, 2472, 3373), Discrete Math I & II (2358, 3398), Linear Algebra (3377), Introduction to Advanced Mathematics (3330), Real Analysis I (3380).
- Aug. 2019 – **Undergraduate Instructor Assistant**,
 Dec. 2019 TEXAS STATE UNIVERSITY - MATH DEPARTMENT, San Marcos , Texas.
 Instruct PreCalculus Lab (2417) of 20 students twice a week, create and assign daily assignments and weekly quizzes, report grades back to students and instructor of record.
- May 2019 **MathWorks Counselor**,
 MATHWORKS, San Marcos, Texas.
 Conduct study sessions and study groups for varying amount of campers, monitor various extracurricular activity. Students are junior high students who show an interest in advanced mathematics and applied to be apart of the residential summer camp.

Graduate Coursework

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| - Geometerization | - Group Cohomology |
| - Group Theory | - Field Theory |
| - General Topology | - Algebraic Topology |
| - Finite Group Theory | - Differential Equations |

Recommendations

- Dr. Andrew Putman**, *University of Notre Dame*, andyp@nd.edu.
Dr. Thomas Keller, *Texas State University*, tk04@Texasstate.edu.
Dr. Samuel Evens, *University of Notre Dame*, sevens@nd.edu.