

Research Interests

My research interests lie in group cohomology of congruence subgroups of arithmetic groups and virtual duality groups.

Education

2021-Present **Ph.D in Mathematics**, *University of Oklahoma*

Advisor: Peter Patzt

2019-2021 **M.S. in Mathematics**, *American University of Beirut*

Advisor: Hazar Abu-Khuzam

Thesis Title: Structure of certain rings with conditions on nonperiodic elements and certain Von-Neumann II-regular rings with prime centers

2015-2018 **B.S. in Mathematics**, *Lebanese University*

Honors and Awards

2025 **David and Judi Proctor Scholarship**, *University of Oklahoma*

2025 **Howard Haines Scholarship**, *University of Oklahoma*

2025 **Arts and Sciences - 31171**, *University of Oklahoma*

2024 **Summer Graduate Fellowship**, *University of Oklahoma*

2023 **Conrad and Ellen Masterson Fellowship in Mathematics**, *University of Oklahoma*

2022 **C. Eugene Springer Mathematics Scholarship**, *University of Oklahoma*

2021-2025 **Fellowship from the Mathematics department**, *University of Oklahoma*

2021-Present **Graduate Teaching Assistantship**, *University of Oklahoma*

2019-2021 **Graduate Assistantship**, *American University of Beirut*

Teaching experience

Instructor of record:

SP24 **Calculus-I Bus/Life/Soc Sci**, *University of Oklahoma*

SP23,FA23 **Functn/Model Bus/Life/Soc Sci**, *University of Oklahoma*

SU23 **Calculus & Analytics Geometry IV**, *University of Oklahoma*

SU22 **Calculus & Analytics Geometry I**, *University of Oklahoma*

Discussion Leader:

FA24,SP25 **Diff & Integral Calculus II (HONORS)**, *University of Oklahoma*

FA22 **Diff & Integral Calculus I**, *University of Oklahoma*

SP22 **Calculus and Analytics Geometry I**, *University of Oklahoma*

Grader:

SP25 **Topology II**, *University of Oklahoma*

FA24 **Topology I**, *University of Oklahoma*

- FA22 **Introduction to Analysis I**, *University of Oklahoma*
- FA21 **Calculus & Analytics Geometry IV**, *University of Oklahoma*
- FA21 **Diff & Int Calc III (HONORS)**, *University of Oklahoma*
- FA20 **Rings & Modules I**, *American University of Beirut*
- FA19-SP20 **Introduction to Analysis I**, *American University of Beirut*

--- **Talks**

- Jul. 2025 **Double Steinberg Coinvariants**, *Scissors Congruence and K-theory Conference, University of Pennsylvania*
- Nov. 2023 **High Dimensional Cohomology of Arithmetic Groups**, *The 2023 Binghamton University Graduate Combinatorics, Algebra, and Topology Conference (expository), Binghamton University*

--- **Conferences and Workshops attended**

- Jul. 2025 **Scissors Congruence and K-theory Conference**, *University of Pennsylvania*
- Jun. 2025 **Polylogarithms, homology of linear groups, and Steinberg modules**, *SwissMAP Research, Station in Les Diablerets*
- May. 2025 **Summer school: Homological aspects of groups and their classifying spaces**, *SwissMAP Research, Station in Les Diablerets*
- Feb. 2025 **Redbud Topology Conference Spring 2025**, *University of Arkansas*
- Jul. 2024 **Collaborative Workshop in K-theory and Scissors Congruence**, *Vanderbilt University*
- Oct. 2023 **The South Central Topology Conference II**, *New Mexico State University*
- Oct. 2023 **Redbud Topology Conference Fall 2023**, *University of Arkansas*
- Jul. 2023 **Stability in Topology, Arithmetic, and Representation Theory 2023**, *Purdue University*
- Jun. 2023 **Master class : Homology of groups and functors**, *Université de Lille*
- April 2023 **Redbud Topology Conference Spring 2023**, *University of Oklahoma*
- Feb. 2023 **The South Central Topology Conference II**, *Texas State University*
- Nov. 2022 **The 2022 Binghamton University Graduate Combinatorics, Algebra, and Topology Conference**, *Binghamton University*
- Oct. 2022 **Redbud Topology Conference Fall 2022**, *University of Arkansas*
- April 2022 **Texas-Oklahoma Representations and Automorphic forms XI**, *Oklahoma State University*

--- **Service and Outreach**

- Spring 2025 **Mentor in the Directed Reading Program**, *University of Oklahoma*
- 2024-2025 **Graduate Student Senate**, *University of Oklahoma*
- 2024-2025 **Outreach of the OU AWM Chapter**, *University of Oklahoma*
- April 2024 **Co-organizer of the OU Graduate Math Fest**, *University of Oklahoma*
- 2023-2024 **President & Co-founder of the OU AWM Chapter**, *University of Oklahoma*
- 2023-2024 **Secretary of the Math Graduate Student Association**, *University of Oklahoma*
- 2022-2023 **Member of the Graduate Advocacy Committee**, *University of Oklahoma*