Sabrina Klement

✉ *sklement2@unl.edu*

Research Interests

Commutative algebra, homological algebra, and symbolic powers of ideals

Education

2021 -   **Ph.D. in Mathematics**, *University of Nebraska-Lincoln*, Expected 2027
Advised by Eloísa Grifo

2021   **M.S. in Mathematics**, *Missouri State University*

2019   **B.S. in Applied Mathematics**, *Missouri State University*
Minor in Computer Science, with courses in Database Systems and Machine Learning

Seminar Talks

Oct 2023   **The Power of Symbolic Powers in Commutative Algebra**, *University of Nebraska-Lincoln*
Presented to the Commutative Algbra Reading Seminar

Nov 2021   **Using Finite Fields to Construct Error-Correcting Cyclic Codes**, *University of Nebraska-Lincoln*
A slightly updated version of previous work, presented to the Graduate Student Seminar

Apr 2021   **Using Finite Fields to Construct Error-Correcting Cyclic Codes**, *Missouri State University*
Presented to the Mathematics Department as completion of Master's Degree Research Requirement

Conferences/Workshops Attended

Jan 2024   **Introductory Workshop: Commutative Algebra**, *SLMath (formerly MSRI)*

Nov 2023   **Gender Equity in the Mathematical Study (GEMS) of Commutative Algebra**, *University of Minnesota*

Apr 2023   **Math 125**, *University of Nebraska-Lincoln*

Jan 2019   **Nebraska Conference for Undergraduate Women in Mathematics**, *University of Nebraska-Lincoln*

Positions Held

2021 -	**Graduate Teaching Assistant**, *University of Nebraska-Lincoln*
2023	**Graduate Research Assistant**, *University of Nebraska-Lincoln* Curriculum Development for College Trigonometry Curriculum Development and Instructor for College of Engineering Summer Bridge Program, a program to help incoming first-year undergraduate Engineering majors succeed in their math courses
2019-2021	**Graduate Teaching Assistant**, *Missouri State University*

Teaching Experience

Associate Convener

Math 102: College Trigonometry, *University of Nebraska-Lincoln*
Responsible for coordinating all sections of College Trigonometry and supporting graduate student instructors
Fall 2023 - Spring 2024

Instructor of Record

Math 102: College Trigonometry, *University of Nebraska-Lincoln*
Spring 2023, Fall 2023, Spring 2024

Math 101: College Algebra, *University of Nebraska-Lincoln*
Summer 2022, Fall 2022

Recitation/Lab Instructor

Math 106: Calculus I, *University of Nebraska-Lincoln*
Fall 2021, Spring 2022

MTH 101: Intermediate Algebra, *Missouri State University*
Fall 2019, Spring 2020, Fall 2020, Spring 2021

Professional Development

2022-2023	**Teaching and Learning Mathematics at the Post-Secondary Level Parts I and II**, *University of Nebraska-Lincoln* A three-credit sequence of courses intended to train mathematics graduate teaching assistants how to be an effective teacher and classroom manager

Service and Outreach

2023 -	**Member of the NCUWM Committee** Nebraska Conference for Undergraduate Women in Mathematics is a conference for undergraduates that provides opportunities to present undergraduate research and connect with other young women mathematicians.
2023	**Graduate Student Orientation Leader**, *University of Nebraska-Lincoln*
2021 -	**UNL Math Day Volunteer** Math Day is an annual event for secondary students to participate in mathematical activities/competitions.

Computer Skills

Languages

C++, HTML, Python, Perl, SQL

Software

LaTeX, Macaulay2, Mathematica, MATLAB, Microsoft Office