Beth Skubak Wolf

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Employment

- Lecturer I-II, University of Michigan, 2016–2019, 2023–present
- Lecturer III-IV, University of Michigan, 2019–2023
- Assistant Professor of Mathematics, Saint Mary's College (Indiana), 2014–2016
- Teaching Assistant/Research Assistant, University of Wisconsin - Madison, 2009–2014

Education

- Ph.D. Mathematics, May 2014, University of Wisconsin - Madison
- B.S. Mathematics, May 2009, Bucknell University

Professional Work & Service Activities

- MaCSS Faculty Mentor, 2025-present
- AWM Mentoring group leader, AY 2024-25
- Exam problem writing, Math 115, Summers 2024, 2025
- Undergraduate Counseling Committee (Major Advising), 2023–present
- Co-instructor, MaCSS Summer Institute, Summers 2023, 2024
- Transfer Credit Evaluation Committee, 2019–present
- Contributor, summer Professional Development Program, 2017–present
- Math 105 (Data, Functions, and Graphs) or Math 115 (Calculus I) course coordinator or co-coordinator, most semesters 2019–2023, Winter 2025
- Co-lead, Math 115 Foundational Course Initiative (FCI) Project, co-sponsored with U-M's Center for Research on Learning and Teaching (CRLT), 2020–2023
- Co-editor, *Newsletter* of the Michigan Section of the MAA, Fall 2017–2023
- Member, MAA Committee on the Trevor Evans Award, July 2018–July 2022; Chair, July 2021–July 2022
- Referee/Reviewer, various undergraduate journals/textbook series, e.g. MAA, Springer

Professional Societies

MAA, Project NExT (Gold '14), Phi Beta Kappa

Grants, Honors, & Fellowships

- MHousing Honored Instructor Award, 2021, 2026
- LEO Professional Development Funds, awarded 2023
- New Initiatives/New Instruction (NINI) grant funding for work on Math 115 FCI project, Summers 2021, 2022
- SISTAR Grant for Undergraduate Research, Saint Mary's College, 2015
- New Faculty Scholar and Lilly Grant, Saint Mary's College, 2014–16
- Project NExT Fellow, 2014–2015
- Elizabeth S. Hirschfelder Scholarship, University of Wisconsin - Madison, 2013
- Math Department TA Teaching Award, University of Wisconsin - Madison, 2011
- National Science Foundation GRFP Honorable Mention, 2010
- Barry M. Goldwater Scholar, 2007–2009

Publications

- *Mastery Assessment: What, Why, and How?*, with Hanna Bennett and Nina White, AMS Notices: Early Career, Oct 2024
- Interviewed for *Case study: Mastery testing at scale in University of Michigan's Calculus 1*, with Hanna Bennett, by David Clark, Grading for Growth blog, 2023.
- Book review of *Significant Figures: The Lives and Work of Great Mathematicians*, Math Horizons, Feb 2018.
- Elizabeth Skubak Wolf and David F. Anderson, *Hybrid Pathwise Sensitivity Methods for Discrete Stochastic Models of Chemical Reaction Systems*, Journal of Chemical Physics, Vol. 142, No. 3, 034103, 2015.
- Elizabeth Skubak Wolf and David F. Anderson, *A finite difference method for estimating second order parameter sensitivities of discrete stochastic chemical reaction networks*, Journal of Chemical Physics, Vol. 137, No. 22, 224112, 2012.
- Pamela Gorkin and Elizabeth Skubak, *Polynomials, ellipses, and matrices: two questions, one answer*, American Mathematical Monthly 188, June-July 2011.

Selected Talks

- *Ellipses, Polynomials, and a Most Marvelous Theorem*, Math Club Talk, University of Michigan, January 2026
- *Building Better Biological Models*, MaCSS seminar talk, U-M, June 2023 & July 2024
- *Implementing Mastery Assessments in Large Introductory Courses*, Michigan MAA Section Meeting, Alma College, April 2023

- *Supporting Students Underrepresented in Mathematics: More Inclusive Instruction and More Equitable Assessment*, Enriching Scholarship conference, virtual, May 2021
- *Analyzing the Effect of Delay in Discrete Stochastic Models and an Application to Mumps Epidemics*, with student B. Kozemzak, Saint Mary's College, April 2016
- *Computing Sensitivities in Discrete Stochastic Reaction Networks with Delay*, AMS Special Session on Stochastic Effects in Models for Mathematical Biology and Ecology, JMM, January 2016
- *Computational Methods for Parameter Sensitivities of Stochastic Chemical Reaction Networks*, Applied Math Seminar, University of Notre Dame, October 2015
- *Fostering Critical Thinking in a Liberal Arts Mathematics Course through Graph Theory*, MathFest, Washington, D.C., August 2015
- *Polynomials, Ellipses, & Matrices: Two Questions, One Answer*, invited talk, MAA North Central Section meeting, University of Minnesota – Duluth, October 2012

Courses Taught

University of Michigan:

- Math 105: Data, Functions, and Graphs, including course coordination, co-coordination
- Math 115: Calculus I, including course coordination
- Math 116: Calculus II
- Math 186: Honors Calculus II
- Math 310: Chance and Choice (IBL probability course)
- Math 425: Introduction to Probability (standard undergraduate course)
- Math 486: Concepts Basic to Secondary School Mathematics
- Math 525: Probability Theory (introductory graduate course)

Additional courses at other institutions:

- Intermediate Algebra
- Liberal Arts Mathematics (graph theory course)
- Mathematics for Elementary Teachers
- Differential Equations
- Numerical Analysis
- Mathematical Modeling
- Data Structures (computer science course, in Java)