

CONTACT INFORMATION	703 Patterson Office Tower Lexington, KY 40506-0027	508-207-7970 hotchkiss@uky.edu
TEACHING INTERESTS	Calculus, college algebra, introduction to proofs, differential equations, pre-calculus, linear algebra.	
ACADEMIC EXPERIENCE	University of Kentucky , Lexington, KY. Full-time Instructor	August 2025 – Present
	University of Kentucky , Lexington, KY. Teaching Postdoctoral Scholar	July 2022 – June 2025
	University of Delaware , Newark, DE. Temporary Assistant Professor	August 2018 – July 2022
	Iowa State University , Ames, IA. Lecturer	August 2017 – May 2018
	Iowa State University , Ames, IA. Graduate Teaching Assistant	August 2012 – August 2017
EDUCATION	Iowa State University , Ames, IA	
	Ph.D., Mathematics	
	<ul style="list-style-type: none"> Thesis Topic: <i>Fourier Bases on the Skewed Sierpinski Gasket</i>. Advisor: Eric Weber 	
	Smith College , Northampton, MA	
	Post-Baccalaureate, Mathematics	
	Haverford College , Haverford, PA	
	B.A., History	
	<ul style="list-style-type: none"> Minor: Mathematics 	
HONORS	Project Next Fellow , Green '23 Cohort, 2023–2024	
TEACHING EXPERIENCE	Instructor of Record: Calculus IV, Spring 2026. Introduction to Contemporary Math, Fall 2022, 2023, 2025, Spring 2026. College Algebra, Summer 2014, Fall 2022, Spring 2023, Spring 2024, Fall 2024, Spring 2025, Fall 2025. Calculus III, Spring 2025. College Algebra (Co-requisite Section), Fall 2023, Spring 2024, Fall 2024, Spring 2025. Calculus 1, Fall 2015, Spring 2016, Spring 2018, and Spring 2024. Introduction to Number Theory, Spring 2023. Analytical Geometry and Calculus B, Spring 2019, 2020, 2021 and 2022. Calculus 1 (for social science and business), Fall 2018, Summer 2019, Fall 2019, 2020, 2021. Analytical Geometry and Calculus C, Spring 2019 and Summer 2021.	

Engineering Mathematics I (Linear Algebra and Differential Equations), Fall 2019, Spring 2020, and Spring 2021.
 College Algebra and Statistics, Fall 2020 and Winter 2021.
 Differential Equations, Summer 2017 and Spring 2019.
 Applied Trigonometry, Fall 2017 and Spring 2018.
 Calculus 2, Summer 2016.

Recitation Leader:

Pre-Calculus, Fall 2014, Spring 2015, and Fall 2017.
 Calculus 2, Spring 2017.
 Calculus 1, Fall 2012 and Fall 2016
 Calculus 3, Spring 2013.

SUPERVISORY
EXPERIENCE

Assistant Course Coordinator, College Algebra, University of Kentucky, Fall 2024, Spring 2025, Fall 2025.

Course Coordinator, Analytical Geometry and Calculus B, University of Delaware, Spring 2022.

Math Help Room Coordinator, Department of Mathematics, Iowa State University, Fall 2013 and Spring 2014

SERVICE

Member, University of Kentucky Math Community and Ethics Working Group, University of Kentucky, 2023-2026.

Member, Inclusive Excellence Committee, Department of Mathematics, University of Kentucky, 2023-2024.

PUBLICATIONS

C. Hotchkiss and E.S. Weber, “A Fast Fourier Transform for Fractal Approximations.” Available: arXiv: 1607.03690 [math.FA]. In *Excursions in Harmonic Analysis: the February Fourier Talks at the Norbert Wiener Center*, Volume 5, 315–329, 2017.

PRESENTATIONS

“Nurturing Mathematical Minds: Mentoring a Math Related Student Group.” As panel organizer. Project NExT, MAA Mathfest, August 7, 2024.

“Oral Exams, and Other Online Experiments.” Teaching Seminar, University of Delaware, Newark, DE, September 10, 2021.

“Engaging Students in Asynchronous Online Courses.” Teaching Seminar, University of Delaware, Newark, DE, October 23, 2020.

“Fourier Bases for Certain Fractal L^2 Spaces.” AMS Special Session on Fractal Geometry, Dynamical Systems, and Applications, Joint Math Meetings, Denver, CO, January 2020.

“Hadamard Matrices and Orthonormal Bases.” Smooth and Non-Smooth Harmonic Analysis (S-NSHA) Bootcamp, Ames, IA, June 2, 2018.

“Fourier Bases on the ‘Skewed Sierpinski Gasket.’” Special Session on Applied Harmonic Analysis: Frames, Samplings and Applications, III, AMS Fall Southeastern Sectional Meeting, Orlando, FL, September 24, 2017.

“A Fast Fourier Transform for Fractal Approximations.” Special Session on Frames, Harmonic Analysis, and Operator Theory, IV, AMS Spring Central Sectional Meeting, Fargo, ND, April 17 2016.

SPECIAL TRAINING

“Teaching and Learning Mathematics Seminar,” University of Kentucky, Department of Mathematics, 2023-2026.

“Ignite Learning: Teaching with a Mentor Mindset,” Mike Wallace, Center for the Enhancement of Learning & Teaching, University of Kentucky, January 6, 2026

“Compassionate Math Webinar,” Dr. Geillan Aly, Dr. Abbe Herzig, and Dr. Aris Winger, Wiley, November 5, 2024.

“Teaching Portfolios & Philosophy Statement”, Center for the Enhancement of Learning & Teaching, University of Kentucky, April 25, 2023

“Inclusive Teaching with Universal Design for Learning (UDL)”, Center for the Enhancement of Learning & Teaching, University of Kentucky, March 28, 2023

“Trauma-Informed Pedagogy,” Center for the Enhancement of Learning & Teaching, University of Kentucky, March 28, 2023

“Setting up an Inclusive Classroom,” Center for the Enhancement of Learning & Teaching, University of Kentucky, January 19, 2023

“Self-Efficacy & Achieving Independence Workshop,” The Graduate School, University of Kentucky, December 9, 2022.

“Sharing Strategies for Facilitating Community and Belonging,” Center for the Enhancement of Learning & Teaching, University of Kentucky, August 24, 2023

“Take Your Canvas Course to the Next Level,” “Introduction to Feedback Fruits Peer and Group Member Review Tools,” “Questions and more questions: 3 strategies to leveraging student learning,” and “What’s New with Poll Everywhere.” In Keep Calm and Teach On, Faculty Commons, University of Delaware, February 2022.

“Diversity, Equity, Inclusion, & Belonging in the Classroom: Higher Ed Faculty Training,” Cengage Webinar, January 2022.

“Effective, helpful multiple choice questions,” “Questions, questions, and more questions: Using Just-in-time teaching, Think-Pair-Share, and Peer Instruction to leverage student learning,” “Interactive Technology for Your Classes,” “Canvas New Quizzes - An Introduction,” and “Using Canvas to Engage and Retain Students with Communication and Feedback Tools.” In Keep Calm and Teach On, Faculty Commons, University of Delaware, August 2021.

“Oral Exams: The Secret to Assessing Students During COVID,” Cengage Webinar, November 2020.

“Exams, Discussion Boards, Projects – Oh My! Assessing Learning in All Course Formats,” Cengage Webinar, August 2020.

“Lifelong Learners: Teaching Students How to Learn,” “Instructor Panel: Teaching During COVID-19,” “Instructor Panel: 5 Real Life Examples of Tools Used to Make and Deliver Videos,” “Optimizing Your Course for Online Delivery Using WebAssign,” “Student Panel: Successful Approaches to Help Students Stay Engaged and Motivated in an Online Course,” “Dealing with the Learning Gap to Fuel Student Success.” In Cengage Summer of Learning Webinar Series, Online, July 2020.

“Create a Welcoming Atmosphere to Lower Students’ Affective Filters,” “Engaging Students on the First Day of Class,” “Interactive Technology for Your Classes,” and “Potpourri of Teaching Development Opportunities: Defining the alphabet soup.” In Keep Calm and Teach On, Faculty Commons, University of Delaware, August 2019.