JEROMY SIVEK

Temple University ◇ Department of Mathematics
1801 N Broad St ◇ Philadelphia, PA 19122
215-204-7888 ◇ sivek@temple.edu

EMPLOYMENT

Temple University August 2014 - Present
Instructional Associate Professor (rank conferred 2021) - Non-Tenure-Track
Department of Mathematics

University of Pittsburgh Fall 2008 - Summer 2014
Teaching Assistant, Teaching Fellow, Research Fellow

Pennsylvania Governor's School for Sciences at Carnegie Mellon University
Teaching Assistant - Summer 2008
Team Project Adviser - Summer 2020

University of Iowa Summer 2007 - Spring 2008
Graduate Teaching Assistant

Duquesne University Spring 2004 - Spring 2007
Undergraduate Research Assistant, Research Fellow

EDUCATION

University of Pittsburgh

Ph.D. in Mathematics, August 2014

- Dissertation: Differentiability, Summability, and Fixed Points in Banach Spaces
- Adviser: Dr. Chris Lennard

Duquense University B.S. in Mathematics, May 2007

TEACHING EXPERIENCE

Temple University

Freshman/ Sophomore Classes: Calculus 1 (Math 1041 - 16 Times and Honors 1941 - 8 times), Calculus 2 (Math 1042 - 11 times and Honors 1942 - 4 times), Ordinary Differential Equations (Math 3041 - 1 time), Basic Concepts in Math (Math 2111 - intro to proofs - Fall 2024), Functions and Modeling (Directed Study, Spring 2025)

Higher-Level Undergraduate Classes: Real and Complex Analysis, Parts 1 and 2 (Math 3137 - 2 times and 3138 - 8 times), Complex Analysis (Math 4051 - Fall 2016 and 3051 - Spring 2026), Partial Differential Equations (Math 4041 - 2 Times), Lebesgue Measure and Integration (Directed Study, Fall 2018, 3 students). (List accurate as of Spring 2026.)

Course Coordinator: Calculus 1, Math 1041, 8 times. Calculus 2, Math 1042, 8 times.

Teaching Awards: Dean's Distinguished Teaching Award, College of Science and Technology, Fall 2020.

Math Department, Excellence in Teaching by an NTT, 2019.

Pedagogical Development

Provost's Teaching Academy Summer 2019.

Calculus Videos Developed library of supplemental videos for Calculus in collaboration with Charles Osborne, math.temple.edu/ugrad/learning_tools/videos1041/, Summer 2020.

SOAR Active Redesign Institute Summer 2021.

Putting the Ball in Their Hands: Mathematics Edition, Poster at Regional Teaching Conference, Temple University, January 2023.

Other Teaching

Lecture Sections at Pitt: Calculus 1, Calculus 2, Calculus 3.

Recitation Sections: (Pitt, Iowa, and PGSS) Variety of courses from Pre-Calculus to Calculus, Discrete Math, Putnam Seminars, and Senior and Graduate level proof-based classes.

Other Temple Classes College of Science and Technology *First Year Seminar* (3 times)

PUBLISHED PAPERS

A Fixed Point Free Contractive Map on a Weakly Compact Convex Set, Studia Mathematica, vol 223, pp 275-283, 2014, joint with Jared Burns and Chris Lennard.

Cesaro Averaging and Extension of Functionals on $L^\infty(0,\infty)$, Journal of Math Analysis and Applications, vol 529, 2024, joint with Pamela Delgado and Chris Lennard.

ADVISED UNDERGRADUATE RESEARCH PROJECTS

Andre Schrock (U Pitt), *Collatz Conjecture*, MAA Allegheny Mountain Sectional, Spring 2012

Matthew Stoffregen (U Pitt), *Complete Residue Systems*, MAA Allegheny Mountain Sectional, Spring 2012

Nicholas Sisko (Temple U), *Collatz Conjecture*, TURF-Crews, Temple University, Spring 2018. Also Temple CST URP Poster Session, Fall 2018. Joint with Charles Osborne.

Garrett Bowser (Temple U), *Collatz Conjecture*, MAA EPaDel at West Chester University, Fall 2018. Joint with Charles Osborne.

Kat Osadchuk (Temple U), *Metric Fixed Point Theory*, Philadelphia Undergrad Math Conference, Spring 2019. Also Temple University Math Club, Spring 2019.

Joseph Franks (Temple U), *Expected Values and the Collatz Conjecture*, PUMC Poster Session, Spring 2019. Joint with Charles Osborne. Also MAA EPaDel at DeSales University, Fall 2019.

Sarah Hafer (Temple U), *Potential Cycles in the 3N+1 Map (Collatz Conjecture)*, PUMC, Spring 2019. Joint with Charles Osborne.

Gillian McGuire (Temple U), *Social Choice and Voting Theory*, MAA EPaDel at DeSales University, Fall 2019. Also Temple Symposium for Undergraduate Research and Creativity - Virtual Poster, Spring 2020. Also MAA EPaDel virtual talk, Spring 2021.

Julianna Sims (Temple U), *Benford's Law*, Temple Symposium for Undergraduate Research and Creativity via VoiceThread, Spring 2021. Also Math Club, October 2021 and Temple CST URS, November 2021.

Julianna Sims (Temple U), *Fixed Point Theory*, Mathfest 2022 presentation. Also CST and university-level symposia. CARAS grant recipient. Completed and defended honors thesis - Spring 2023.

Brandon Calia (Temple U), *Ranked Choice Voting Math*, Mathfest 2022 presentation. Also contributed talk to PUMC 2023 at Rutgers Camden (April 2023). SSP grant recipient.

Liz Abt-Fraioli (Temple U), *Fixed Point Free Maps, Invariant Sets, and Complex Variations* PUMC 2023 poster presentation, April 2023. Velay grant recipient, twice. Multiple subsequent posters and presentations through Spring 2025.

Chris Heitmann (Temple U), *Fixed Point Theory*, Temple URP grant recipient - summer 2023. MAA EPaDel, Fall 2023.

Cayla Coulibaly (Temple U), *Ranked Choice Voting and Social Identity* Began Summer 2025, support from SURE program. Presentation to Temple Math Club, Oct '25. Poster at CST symposium, Fall '25.

Helike Milestone (Temple U), *Spatial Characteristics of Ranked Choice Disagreements* Began Summer 2025. Support from CST. Presentation to Temple Math Club, Oct '25. Poster at Temple Univ symposium, March 2026.

EXTERNAL RESEARCH TALKS

New Examples of Contractive and Fixed Point Free Maps, AMS Special Session at Joint Math Meetings, Washington DC, Jan 7th 2026.

Peano and Caratheodory Derivatives in Banach Spaces, AMS Sectional Meeting, St. Louis, October 2013.

Knot Theory - Various Topics, Spring MAA Allegheny Sectional Meetings 2005, 2006. National MAA Meeting Summer 2006. Adviser: Dr. Eric Rawdon.

Bayesian Process Models, MAA Sectional, Spring 2007, Adviser: Dr. John Kern.

INTERNAL SEMINAR TALKS

Ranked Choice Voting and Arrow's Theorem Temple Math Club - October 2025

Math and Voting Temple Math Club - March 2023

Fixed Point Theory Temple Math Club - October 2021

Voting Systems, Counting Methods, and Social Choice Theory Temple Math Club - Spring 2019.

Nonstandard Analysis Temple Math Club - Fall 2017.

Pi is not Constant Temple Math Club - Fall 2016.

Banach Manifolds Pitt Functional Analysis Seminar - Spring 2014.

Asplund Spaces Pitt Seminar - Fall 2013.

Nonstandard Analysis Pitt Seminar - Fall 2013.

The Minimal Displacement Problem Four Pitt Seminars - Spring 2012.

C_p Theory (Analytic Topology) Two Pitt Seminars - Fall 2011.

Bayesian Process Models Duquesne Seminar - Spring 2007.

Advances in Computational Knot Theory Duquesne Seminar - Spring 2006.

COMMITTEE SERVICE AND CONFERENCE ORGANIZING

Conference Co-Organizer Philadelphia Undergraduate Mathematics Conference Series. Joint with Janet Fierson, Siqi Fu, Maria Lorenz, Irina Mitrea, and Charles Osborne. Spring 2019 at Temple. Spring 2023 at Rutgers-Camden.

Session Referee Temple CST URP Poster Session, Fall 2018 and Fall 2020.

Session Moderator Temple Undergrad Conference. TURF-CreWS, Spring 2018.

Departmental Undergraduate Committee Temple University Mathematics. Participating in the perennial work of cultivating the best possible program. Fall 2018-present.

Pre-Health Evaluation Committee that evaluates candidates from the Temple undergraduate community who are interested in attending health-related graduate school. 4 evaluations in 2019 and 3 evaluations in 2020.

Department and College Level Personnel Committees Various and anonymous, 7 total (committee for AY).

Dean's Advisory Committee Began service in Fall 2025.

Committee for Grants for Undergraduate Research in Mathematics Small panel that administers "on-ramp" grants for undergraduates interested in math research

RESEARCH ON GRANTS

Fixed Point Theory Temple University (Summer 2023 and 2024). Collaboration with undergraduates Liz Abt-Fraioli and Chris Heitmann. Support came from Velay (twice) and URP grants.

Grants for Undergraduate Research in Mathematics Initiated department-level program to award small grants for undergraduates to work on advised research projects. Cohort of 5 students and 3 advisers in 2022-2023 academic year. Broader cohort included non-funded students and lead to 7 total completed/ presented projects.

Fixed Point Theory Temple University (Summer 2022). Collaboration with undergraduate Julianna Sims who received small (CARAS) grant for participation and gave MAA Mathfest poster.

Ranked Choice Voting Temple University (Summer 2022 and 2023). Collaboration with undergraduate Brandon Calia who received small (SSP) grant for participation and gave MAA Mathfest poster, PUMC talk, and others presentations.

Fixed Point Properties for Contractive Maps University of Pittsburgh (2012-2013). Principal Investigator: Dr. Chris Lennard.

Knot Theory, Various Topics Principal Investigator: Dr. Eric Rawdon. NSF 0311010 (2003-2006). Also, NSF 0621903 (2006).

Bayesian Process Models Small internal grant, Duquesne University (2007). Adviser: Dr. John Kern.