

Curriculum Vitae
Pamela I. Delgado

The University of Texas at Tyler
Department of Mathematics

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EDUCATION

Ph.D., Mathematics, University of Pittsburgh, 2020.

Thesis: *Cesàro averaging and extension of functionals on infinite-dimensional spaces.*

Advisor: Dr. Chris Lennard.

MS., Mathematics, East Tennessee State University, 2014.

Thesis: *Bipartitions Based on Degree Constraints.*

Advisor: Dr. Teresa Haynes.

B.S, Mathematics, University of Costa Rica, 2012.

PUBLICATIONS

Pamela Delgado, Chris Lennard, Jeromy Sivek, *Cesàro averaging and extension of functionals on $L^\infty(0, \infty)$* , Journal of Mathematical Analysis and Applications, **529** Issue 1 (2024), 127593, DOI:10.1016/j.jmaa.2023.127593.

Pamela Delgado, Wyatt J. Desormeaux & Teresa W. Haynes, *Partitioning the Vertices of a Graph into a Total and Independent Dominating Set*, Ars Combinatoria, **144** (2019), 367-379.

Pamela Delgado, Wyatt J. Desormeaux & Teresa W. Haynes, *Partitioning the vertices of a graph into two total dominating sets*, Quaestiones Mathematicae, **39** (2016), no.7, 863-873, DOI: 10.2989/16073606.2016.1188862

Pamela Delgado, Teresa W. Haynes & Stephen T. Hedetniemi, *Bipartitions based on degree constraints*, Congressus Numerantium, **219** (2014), 193-206

TEACHING EXPERIENCE

Assistant Professor, University of Texas at Tyler

- Real Analysis I: Fall 2025.
- Foundations of Mathematics: Fall 2024, Spring 2025.
- Multivariate Calculus: Fall 2024, Spring 2025.
- Calculus II: Fall 2025

Assistant Professor, Christian Brothers University

- Senior Seminar II: Spring 2023, Spring 2024.
- Senior Seminar I: Fall 2022, Fall 2023.
- Abstract Algebra: Spring 2024.
- Complex Analysis: Fall 2021, Fall 2022.
- Differential Equations: Summer 2023.
- Calculus III: Spring 2022, Summer 2022, Spring 2023.
- Calculus II: Summer 2022, Fall 2023.
- Calculus I: Fall 2020, Spring 2021, Fall 2022, Spring 2023, Summer 2023.
- Applied Math-Intro to Calculus I: Spring 2022.
- Health Science Applied Algebra and Statistics: Spring 2022.
- Math Topics for Elementary Education: Spring 2021.
- Finite Math: Fall 2020, Spring 2021, Spring 2024.
- Fundamentals of Algebra: Summer 2021, Spring 2021, Fall 2023.
- Statistics Introduction: Fall 2023 (online course).

Instructor, University of Pittsburgh

- Calculus 3: Summer 2016
- Calculus 2: Summer 2018, Summer 2017
- Calculus 1: Fall 2017

Instructor, East Tennessee State University

- Calculus 1: Summer 2014, Fall 2013.
- Calculus 2: Spring 2014.

Instructor, University of Costa Rica

- Calculus 1 for health sciences: First semester 2012, Second semester 2012.

SENIOR PROJECT ADVISING AT CHRISTIAN BROTHERS UNIVERSITY

- Samantha Anderson, *Black Scholes Equation and Applications*, Spring 2023.
- Evan Carter, *Mathematics in Sports*, Spring 2024.
- Hadi Ghattas, *Progressively Finite Games and Nim-Type Games*, Spring 2023.
- Kylea Heath, *Using Physics concepts to teach Mathematical Proofs*, Spring 2024.
- Faith Ivy, *Optimization in Calculus of Variations*, Spring 2023.
- Ethan Lam, *Nonstandard Analysis: An Alternative Approach to Analysis*, Spring 2023.
- Adam Moore, *Computational Complexity*, Spring 2023.
- An Nguyen, *How much money do you need for retirement?*, Spring 2023.
- Patrick Oweijane, *Key Elements of Cryptography*, Spring 2024.
- Nate Pennington, *Polya's Enumeration Formula*, Spring 2024.
- Josh Sabio (co-advisor), *Deriving the Schrodinger Equation and an Analysis from the perspective of Operator Theory*, Spring 2023.
- Samanta Sosa, *An in-depth view of Graph Coloring*, Spring 2023.
- Chase Townley, *An Exploration of Singular Value Decomposition*, Spring 2024.
- Chris Warner, *Predictable Games: How two rational players settle on stable strategies*, Spring 2024.
Recipient of the **Walt and Susan Patterson Prize** for his poster presented at MAA Southeastern meeting 2024.

SERVICE

The University of Texas at Tyler

- Member of the Curriculum Committee, August 2024-Present.
- Served as Poster Judge for *The Lyceum*, April 2025.
- Volunteered at the 19th Annual TUMC, November 2024.
- Served as Panelist for *Discussion on masters programs*, held at the 19th TUMC, November 2024.
- Volunteered at the *Top 25 % Showcase* event, October 2024.

Christian Brothers University

- Member of the Grade Appeal Committee, March 2022-May 2024.
- Academic Advisor for Student Organization, CBU's Student Organization of Mathematical Association of America. April 2021-May 2024.

- Member of the Scientific Committee for SIMMAC 2024, October 2022-February 2024. International Symposium on Mathematical Methods Applied to the Sciences 2024, held in Guanacaste, Costa Rica.
- Member of the Search Committee for the position Assistant Professor of Mathematics, May 2023.
- Faculty Representative on the vetting process for University Presidential Candidate, April 2022.
- Member of the subcommittee for Academic Affairs and Curriculum, April 2021-2022. The President's Commission on Diversity, Equity and Inclusive Excellence.

University of Pittsburgh

- Chapter Treasurer, February 2019-July 2020
University of Pittsburgh chapter of the Association for Women in Mathematics.
- Event co-organizer and co-host, *Talk: A scientist journey from academia to industry*, November 2019. University of Pittsburgh chapter of the Association for Women in Mathematics.
- Event co-organizer and co-host, *Workshop: Negotiation and Management skills for women in science*, November 2019. University of Pittsburgh Whittington Fellows professional development event.
- Event co-organizer and co-host, *Panel Discussion: Women in STEM*, April 2019.
University of Pittsburgh chapter of the Association for Women in Mathematics.

PRESENTATIONS ON RESEARCH

Constructing new preduals of the Trace Class Part 1: Preduals of Classical Sequence Spaces. Talk given at the Analysis Seminar, The University of Texas at Tyler, February 2025.

A new predual of the Trace Class. Talk given at the Mathematics Colloquium, The University of Texas at Tyler, November 2024.

Weak Compactness and the Fixed Point Property. Talk given at the Analysis Seminar, The University of Texas at Tyler, October 2024.

The explosion operator and a new predual of the Trace Class. Talk given at the Analysis Seminar, The University of Texas at Tyler, September 2024.

Cesàro averaging and extension of functionals in $L^\infty(0, \infty)$. Talk given at the MAA Southeastern meeting, University of Tennessee, Knoxville, 2024.

The Cesàro averaging operator in L^∞ and invariant Banach limits. Talk given at the *Operator Theory Seminar*, University of Memphis, 2021.

Generalization of iterates of Cesàro Averaging for functions to include non negative real powers, and Banach limits invariant under these new operators. Talk given at the *Joint Mathematics Meetings*, Denver CO, 2020.

Weak Compactness and the Fixed Point Property. Talk given at the *Joint Mathematics Meetings*, Baltimore MD, 2019.

Near-infinity concentrated norms and the fixed point property for nonexpansive maps on closed, bounded, convex sets. Poster session presented at the *Recent Advances in Functional Analysis Conference*, Kent State University. Kent OH, 2018.

Weak compactness is equivalent to the fixed point property in c_0 . Talk given at the *Functional Analysis Seminar*, University of Pittsburgh. Pittsburgh PA, 2017.

A renorming of some nonseparable Banach spaces with the fixed point property. Talk given at the *Fixed Points, Banach Spaces and Metric Spaces Mini-Conference*, University of Pittsburgh. Pittsburgh PA, 2016.

A renorming of some nonseparable Banach spaces with the fixed point property. Poster session presented at the *Infinite Dimensional Analysis Conference*, Kent State University. Kent OH, 2016.

Bipartitions Based on Minimum Degree. Talk given at the *Forty-Fifth Southeastern International Conference on Combinatorics and Graph Theory*, Florida Atlantic University. Florida, March 2014

PRESENTATIONS ON PROMOTING MATHEMATICS

Beyond Sequences: Nets and the Riemann Integral. Talk given at the *Math Club*, The University of Texas at Tyler, 2025.

Visiting infinite dimensional spaces. Talk given at the MAA Student Organization event *Lightning Talks*, Christian Brothers University, 2021.

An Introduction to Nets and Filters. Talk given at the *Undergraduate Mathematics Seminar*, University of Pittsburgh, 2020.

My Research Journey. Talk given at the *Graduate Student Seminar*, University of Pittsburgh, 2020.

ATTENDED CONFERENCES AND SUMMER SCHOOLS

Brazos Seminar, Waco TX, April 2025.

Brazos Seminar, Houston, TX, November 2024.

MAA Southeastern Meeting, Knoxville TN, 2024.

Joint Mathematics Meetings, Denver CO, 2020.

Joint Mathematics Meetings, Baltimore MD, 2019.

Recent Advances in Functional Analysis Conference, Kent OH, 2018.

Fixed Points, Banach Spaces and Metric Spaces Mini-Conference, Pittsburgh PA, 2016.

Infinite Dimensional Analysis Conference, Kent OH, 2016.

Forty-Fifth Southeastern International Conference on Combinatorics and Graph Theory, Florida, March 2014

26th Cumberland Conference on Combinatorics, Graph Theory and Computing, Tennessee, May 2013

EMALCA (Math Schools for Latin America and the Caribbean), Costa Rica, January 2012

III EMALCA (Math Schools for Latin America and the Caribbean), Guatemala, September 2009

XIV ELAVIO (Summer Latin America School of Operations Research), Mexico, August 2009

FELLOWSHIPS AND AWARDS

Whittington Dissertation Fellowship, University of Pittsburgh, 2019-2020.

This competitive fellowship is awarded to women Ph.D. students in disciplines where women have traditionally been underrepresented in Dietrich School programs, who are of exceptional ability and promise, and who in academic year 2019-2020 expect to complete their doctoral dissertation.

K. Leroy Irvis Fellowship, University of Pittsburgh, 2014-2015.

These fellowships provide distinguished minority graduate students with a one-to-one faculty / student mentoring relationship and no teaching responsibilities the first year.

Outstanding Graduate Student Award, East Tennessee State University, 2013-2014.

This award recognizes outstanding students at the graduate level in the Mathematics and Statistics department.