Patrick T. Davis

http://patrickdavis.info

Mailing Address:
328B Dunlap Dr.
Hartsville, SC 29550

Email:
patricktd3@gmail.com
Office Phone:
(586) 202-4893

Education

PhD in Mathematics. Central Michigan University (CMU) December 2017

Dissertation: *Delay Differential Equations in Epidemiological Modeling*

MA in Mathematics. CMU May 2017

Qualifying Exams: Algebra and Analysis

BS in Mathematics & General Science. Eastern Michigan University (EMU) April 2011

Majors: Mathematics, General Science. Minor: Economics

Academic Positions

Accelerate Mathematics Instructor August 2017 – present

South Carolina Governor's School for Science & Mathematics (SCGSSM)

Full-time faculty member of the Accelerate program at SCGSSM – which provides an engineering-focused curriculum to students across the state of South Carolina via an online platform. Daily instruction is given in real-time via a video conferencing system.
Courses taught: Pre-Calculus (Aug 2017-present), Calculus BC (Aug 2017-present).

Graduate Student Assistant August 2011 – May 2017

Central Michigan University

Full-time graduate student in the Department of Mathematics. Held teaching assistantships, research assistantships, and doctoral fellowships at various times.
Courses taught: Intermediate Algebra (FA12, SP13), Business Calculus (FA14, SP14, FA16), Linear Algebra (SP15), Differential Equations (FA15).

Additional Details

Selected Presentations

- Winthrop University Student Seminar (2017). *The Mathematics of Disease: An Introduction to Compartmental Modeling.*
- CMU Graduate Student Seminar (2014-17). *A Practical Introduction to LaTeX, Lessons from SMS: Infectious Disease Modeling, Lessons from MSRI: An Introduction to Systems Biology, An Introduction to Delay Differential Equations.*
- Joint Mathematics Meetings (2011-12, 2016-17). *Modeling an Infectious Disease in a Continuous Region with an Embedded Metapopulation, Effect of Delayed Dispersal in an Infectious Disease Model of a Large Metapopulation, Modeling the Spread of a Ug99-Type Wheat Pathogen in the United States of America, Modeling the Effects of Cannibalistic Behavior in Zebra Mussel* (Dreissena polymorpha) Populations.
- MAA MathFest (2016). *Using Python in an Introductory ODE Course.*
- SIAM Annual Meeting (2016). *A General Framework for the Analysis of Infectious Disease Models with Delayed Differential Equations.*

Selected Technical Skills

- Highly proficient: LaTeX, MATLAB, *Mathematica*, MS Office.
- Moderately proficient: GeoGebra, HTML & CSS, Python.

Selected Awards & Recognitions

- Outstanding Teaching Assistant
- Outstanding Tutoring Honorable Mention
- Doctoral Research Fellowship

Selected Service Activities

- AMS Graduate Student Chapter at CMU: President (Aug 2015 – May 2017), Treasurer (Feb 2015 – Aug 2015).
- Mathematics Club at EMU: President (Jan 2010 – May 2011), Vice President (Sept 2009 – Jan 2010).

Professional Organizations

- American Mathematical Society (2010 – present)
- Mathematical Association of America (2015 – present)
- Society of Industrial and Applied Mathematics (2013 – present)
- The National Consortium of Secondary STEM Schools (2017 – present)