

Daniel C. Cheshire

Education

- 2017 *Ph.D. in Mathematics Education*
Texas State University, San Marcos, TX
- 2014 *M.S. in Pure Mathematics*
Texas State University, San Marcos, TX
- 2001 *B.S. in Political Science; mathematics minor*
Virginia Polytechnic Institute & State University, Blacksburg, VA

Certifications

- 2004-2009 *Secondary Mathematics Teacher Certification*
Texas State Board for Educator Certification

Employment History

- 2018-2024 *Math Center Coordinator / Clinical Faculty*
Academic Center for Excellence, Our Lady of the Lake University, San Antonio, TX
- 2017-2018 *Mathematics Lecturer*
Department of Mathematics, Texas State University; San Marcos, TX
- 2010-2017 *Graduate/Doctoral Teaching Assistant*
Department of Mathematics, Texas State University
- 2014-2015 *Undergraduate Instructional Assistant Program Director*
Co-development and supervision of U.I.A. training program
Department of Mathematics, Texas State University
- 2012-2013 *Curriculum Development for FOCUS program*
Center for Mathematics Readiness, Texas State University
- 2009-2010 *Mathematics & Physics Tutor*
Tutoring support for low-income students and students with disabilities
Student Support Services, Texas State University
- 2005-2009 *Mathematics Department Chair and Lead Teacher*
Katherine Anne Porter HS; Wimberley, Texas
- 2002-2005 *Secondary Teacher of Mathematics & Physics*
Katherine Anne Porter HS; Wimberley, Texas

Research Presentations

Refereed

Cheshire, D. & Fagan, J. (2018, February). *Content analysis of introductory textbooks in point-set topology*. RUME 21 Poster Presentation, San Diego, CA.

Cheshire, D. (2016, February). *On the axiomatic formalization of mathematical understanding*. RUME 19 Preliminary Report, Pittsburgh, PA.

Cheshire, D. (2015, August). *Finite topological spaces as a pedagogical tool for teaching concepts in calculus*. MAA MathFest Themed Contributed Paper Presentation, Washington, D.C.

Cheshire, D. (2015, February). *On the construction of abstract knowledge in advanced mathematics: Students' understanding of continuous functions in the transition to topology*. RUME 18 Poster Presentation, Pittsburgh, PA.

Non-Refereed

Cheshire, D. (2014, November). *An exploration of the construction of abstract knowledge in advanced mathematics*. Texas State University 6th International Research conference for Graduate Students Poster Presentation, San Marcos, TX.

Cheshire, D. (2014, October). *Developing the notion of continuity in the transition to topology*. Texas State University Department of Mathematics Graduate Open House, San Marcos, TX.

Cheshire, D. (2011, October). *The Pontryagin Surface*. Texas State University Department of Mathematics Graduate Open House, San Marcos, TX.

Professional Development Presentations

Cheshire, D. & Fagan, J. (2016, July). *Exploring notions of distance and shape: From Euclidean geometry to topology*. Conference for Advancement of Mathematics Teaching, San Antonio, TX.

Cheshire, D. (2013, March). *Learning activities with the temperature sensor*. FOCUS-CCA Training Seminar, Texas State University-San Marcos, TX.

Cheshire, D. (2012, May). *Learning activities with the CBL motion and light sensors*. FOCUS-CCA Training Seminar, Texas State University-San Marcos, TX.

Cheshire, D. (2012, August). *Use of data collection technologies in the classroom*. Graduate Instructional Assistants Orientation, Department of Mathematics, Texas State University-San Marcos, TX.

Cheshire, D. (2012, March). *Overview of CBL sensors for use with Texas Instruments calculators*. FOCUS-CCA Training Seminar, Texas State University- San Marcos, TX.

Cheshire, D. (2012, January). *Student-centered activities for developmental mathematics*. Graduate Instructional Assistants Orientation, Department of Mathematics, Texas State University, San Marcos, TX.

Undergraduate Courses Taught

Principles of Mathematics for Secondary Teachers

Informal Geometry for Secondary Teachers

Mathematics for Business and Economics I (pre-calculus)

Mathematics for Business and Economics II (calculus)

Elementary & Intermediate Algebra (developmental level)

College Algebra (hybrid courses: 1) with statistics, and 2) paired with developmental mathematics)

Pre-Calculus Mathematics

Calculus I (lab instructor)

Calculus II (lab instructor)

Honors & Awards

2015-16 *Graduate Student Award for Outstanding Achievement-Doctoral Level*

2014, 2015, 2016 *Graduate Recognition for Academic Excellence-Doctoral Level*

Grant Activities

2023- *SPIRAL Program*: Principal Investigator

NSF Improving Undergraduate STEM Education for Hispanic Serving Institutions (IUSE-HSI) grant with objective to redesign College Algebra classes for relevancy.

2012-2013 *FOCUS Program*: Curriculum writer and instructor of record

FOCUS was operated through the Center for Mathematics Readiness at Texas State University with a grant from the Texas Higher Education Coordinating Board.

2005-2009 *21st CCLC After-School Program*: Lead teacher and tutoring supervisor

The 21st Century Community Learning Centers project is a federally funded initiative supporting the creation of community learning centers to provide academic enrichment opportunities during non-school hours for students.

Professional Membership

2016 *Alpha Chi National College Honor Society*

2014 *Mathematics Association of America, SIGMAA on RUME*

2013 *Pi Mu Epsilon Mathematics Honor Society, Texas Rho Chapter*

2013 *National Council of Teachers of Mathematics*

Community Service

2013-2024 *Burnett Ranch River Park Association*: President, Board of Directors

2012-2015 *First Lego League Team Coach:* New Braunfels Public Library

2004-2009 *U.I.L. Academic Team Coach:* Katherine Anne Porter High School

References

Mathematics Education Research

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Teaching and Educational Leadership

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