Curriculum Vitaeⁱ Dionne T. Bailey

INSTITUTIONS OF HIGHER EDUCATION ATTENDED

- Odessa College, 1990-1993
- Midland College, 1990-1993, A.S. in Engineering
- The University of Texas of the Permian Basin, 1994-1996, B.S. in Mathematics
- Emory University, 1996-2001, Ph.D. in Mathematics

TEACHING POSITIONS

- Emory University, Teaching Assistant, 1997-2001
- Angelo State University, Assistant Professor, 2001-2009
- Angelo State University, Associate Professor, 2009-2015
- Angelo State University, Professor, 2015-present

HONORS

- The article "The Streak" appeared on the <u>ASU news webpage</u>ⁱⁱ which summarized the story behind the 20-year streak in secondary mathematics program at ASU.
- Angelo State University Fifteen Years Service Award, January 2017.
- Angelo State University Faculty Excellence in Teaching Semi-finalist, May 2016.
- Angelo State University Faculty Excellence in Teaching Semi-finalist, May 2012.
- Angelo State University Ten Years Service Award, April 2012.
- Keynote Speaker at the 4th Annual Student Research Conference of the University of Texas System Louis Stokes Alliance for Minority Participation (LSAMP), October 2002.
- Highlighted in the 2002 National LSAMP Magazine by the UT System LSAMP, 2002.
- Marshall Hall, Jr., Teaching Award, Emory University, May 2001.
- Emory Minority Graduate Fellow, September 1996 May 2001.
- University of Texas System Alliance for Minority Participation (AMP) Student Research Award, June 1995 May 1996.

DIRECTED UNDERGRADUATE RESEARCH

- "Topics in Number Theory," Spring 2017
- "Topics in Problem Solving," Summer 2016
- "Topics in Mathematics with Applications," Summer 2015
- "Discrete Optimization Problems," Fall 2012
- "Advanced Combinatorics," Spring 2011. Student presented some of his work in a presentation entitled "Hat Guessing Games" at the Texas Academy of Science in March 2011 and the Texas section of the MAA in April 2011.
- "Exploring Hypercubes," Fall 2010

- "Applications of Graph Theory," Fall 2008. Student presented some of her work in a presentation entitled "Puzzling Graphs" at the Texas section of the MAA in April 2009.
- "Chemical Applications of Group Theory," Spring 2007
- "Mathematics of Games," Spring 2005
- "Mathematical Structures of Music," Fall 2004
- "Abstract Algebra II", Spring 2004

SIGNIFICANT PROFESSIONAL PUBLICATIONS

- T. Leong, D. Bailey, E. Campbell, C. Diminnie, and P. Swets, "An Alternative Approach to the A=mP Problem for Triangles," *Mathematics Magazine*, 80, no. 5, December 2007, pp. 363-368.
- D. Bailey and V. Powers, "Constructive Approaches to Representation Theorems in Finitely Generated Real Algebras," *DIMACS Series in Discrete Mathematics and Theoretical Computer Science*, 60, 2003, pp. 13-21.
- D. Bailey and R. Fletcher, "The Square Root of a Partially Looped Tournament," *Congressus Numerantium*, 122, 1996, pp. 161-183.

CONFERENCE PRESENTATIONS

- "The Arithmetic-Geometric Mean Inequality in Precalculus," Annual meeting of the Texas Section of the Mathematical Association of America, April 2013.
- "The Arithmetic-Geometric Mean Inequality in Precalculus," Texas Academy of Sciences, March 2013.
- "Cassini's Identity," Annual meeting of the Texas Section of the Mathematical Association of America, April 2012.
- "Cassini's Identity," Texas Academy of Sciences, March 2012.
- "Applications of Jensen's Inequality", Texas Academy of Sciences, March 2011.
- "Methods for Approximating Square Roots", Annual meeting of the Texas Section of the Mathematical Association of America, April 2010.
- "Methods for Approximating Square Roots", Texas Academy of Sciences, March 2010.
- "Another Approach for Solving A=mP for Triangles", Annual meeting of the Texas Section of the Mathematical Association of America, April 2009.
- "Another Approach for Solving A=mP for Triangles", Texas Academy of Sciences, March 2009.
- "Mean Stuff," Annual meeting of the Texas Section of the Mathematical Association of America, April 2008.
- "Mean Stuff," Texas Academy of Science Annual Meeting, March 2008.
- "Math Activities Literacy and Manipulatives," Mathematics for English Language Learners Conference, July 2007.
- "Analytic Approach to Polygonal Area," Mathematics for English Language Learners Conference, July 2007.
- "MELL Initiative Project Mathematics for English Language Learners," Conference for the Advancement of Mathematics, June 2007.
- "Who was Pascal?" Pi Mu Epsilon initiation dinner, Angelo State University, May 2007.
- "Analytic Approach to Polygonal Area," Texas Academy of Science Annual Meeting, March 2007.

- "Pre-Service Best Practice A 'Checklist of Guiding Principles' Instrument," Mathematics for English Language Learners Conference, July 2006.
- "Solving Optimization Problems using Precalculus Methods," Annual meeting of the Texas Section of the Mathematical Association of America, April 2006.
- "Contemporary Practices in Mathematics Preservice Education," International Mathematics and Education Conference, July 2005.
- "Analytic Approach to Polygonal Area," Annual meeting of the Texas Section of the Mathematical Association of America, April 2005.
- "Solving Optimization Problems using Precalculus Methods," Texas Academy of Science Annual Meeting, March 2004.
- "The Square Root of a Partially Looped Tournament," NSF Alliances for Minority Participation (AMP) National Student Research Conference, July 1996.
- "The Square Root of a Partially Looped Tournament," MAA Annual Meeting, Texas Section, March 1996.

OTHER PROFESSIONAL ACTIVITY

- Program Director, ASU-Howard College Title III HSI STEM grant, 2013-2016.
- Supported by the NSF-funded grant Science Partnership for Undergraduate Recruitment, Retention, and Success (SPURRS), 2010-2014.
- Served as Vice Chair of the Mathematics Section of the Texas Academy of Science, 2008-2013.
- Supported by the Texas State University System Mathematics for English Language Learners (TSUS-MELL) initiative, 2005-2007.
- Texas Section Project NExT Fellow, 2002.

ⁱ This vita (revised on January 2018) is prepared in response to HB 2504, in accordance with THECB Rule 4.227(2).

ⁱⁱ https://www.angelo.edu/content/news/14333-the-streak/Templates/news-feature.php