

Debra D. Ward, PhD

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ACADEMIC & PROFESSIONAL BACKGROUND

Educational Background

Ph. D.	Aug. 2013	Texas State University San Marcos, TX Department of Mathematics	Mathematics Education
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Dissertation: "An Investigation of the Relationships Between Musical Training and Mathematical Problem Solving"

Advisor: Selina V. Mireles, Mathematics, Texas State University

M. Ed.	Aug. 2008	Texas State University San Marcos, TX Department of Mathematics	Mathematics Education
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B. S.	Dec. 2004	Texas State University San Marcos, TX Department of Mathematics	Mathematics
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University Experience

Assistant Professor		Utah Valley University Orem, UT Mathematics	July 2019 – Present
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Assistant Professor		Utah Valley University Orem, UT Developmental Mathematics	July 2017 – July 2019
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Lecturer		Utah Valley University Orem, UT Developmental Mathematics	Aug 2016 – July 2017
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Assistant Professor		Cameron University Lawton, OK Mathematics	Aug 2013 – Aug 2016
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Doctoral Teaching Assistant		Texas State University San Marcos, TX Mathematics	Aug 2011 – Aug 2013 Aug 2008 – Dec 2009
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Graduate Instructional Assistant		Texas State University San Marcos, TX Mathematics	Aug 2006 – Aug 2008
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Relevant Professional Experience and Certification

Texas Educator Certificate: Mathematics 8-12	Valid through Aug 2022
Senior Program Coordinator Charles A. Dana Center at the University of Texas at Austin	Dec 2009 – Aug 2011
Mathematics Faculty Southside High School, San Antonio, TX	Jan 2005 – Aug 2006

TEACHING

Courses Taught

Utah Valley University

Fall 2019:	Math 1050	College Algebra
	Math 2000	Algebraic Reasoning with Modeling
	Math 2010	Mathematics for Elementary Teachers I
Spr 2019:	Mat 1000	Integrated Beginning and Intermediate Algebra
	Math 2010	Mathematics for Elementary Teachers I
Fall 2018:	Mat 0950	Foundations for Algebra
	Mat 1030	Quantitative Reasoning
	Math 2010	Mathematics for Elementary Teachers I
	Uvst 290R	Community Engagement and Applied Service Learning
Sum 2018:	Mat 1010	Intermediate Algebra
Spr 2018:	Mat 1030	Quantitative Reasoning
	Math 2010	Mathematics for Elementary Teachers I
	Math 2020	Mathematics for Elementary Teachers II
Fall 2017:	Mat 1030	Quantitative Reasoning
	Mat 1035	Quantitative Reasoning with Integrated Algebra
Sum 2017:	Mat 0950	Foundations for Algebra
Spr 2017:	Mat 090R	Individualized Mathematics Review
	Mat 0920	Math Fundamentals
	Mat 1010	Intermediate Algebra
	Mat 1030	Quantitative Reasoning
Fall 2016:	Mat 0990	Beginning Algebra
	Mat 1010/50	Intermediate & College Algebra Corequisite

Cameron University

Math 0013 Pre-Algebra
Math 0103 Beginning Algebra
Math 0213 Intermediate Algebra
Math 1513 College Algebra
Math 2353 Math for Elementary Teachers I
Math 3001 Geometer's Sketchpad
Math 4433 Matrix Algebra
Math 4491 Independent Study Mathematics
Stat 2613 Business Statistics
Stat 3013 Intro to Probability & Statistics

Texas State University

Math 1300 Pre-College Algebra
Math 1311 Basic Mathematics
Math 1315 College Algebra
Math 1319 Math for Business & Economics I
Math 1329 Math for Business & Economics II
Math 2311 Principles of Mathematics I
Math 2312 Informal Geometry
Math 2328 Elementary Statistics

Curriculum Development Projects

MAT 1030/1035 Quantitative Reasoning (Fall 2016 - Spring 2017)

Course Description: Teaches how to communicate, interpret, and analyze quantitative information found in the media and in everyday life to make sound personal, professional, and civic decisions.

MATH 2000 Algebraic Reasoning with Modeling (Fall 2017 - Present)

Course Description: Presents the basic ideas of sets and functions in the context of and motivated by modeling bivariate data. Includes basic set theory such as unions, intersections, Venn diagrams, etc. Includes the basic ideas and the algebra of functions including polynomial, exponential, and logarithmic functions. Also includes some basic combinatorics and counting principles as well as arithmetic and geometric sequences. Culminates in a pictorial introduction to the basic ideas of calculus presented with minimal computation.

Teaching Honors and Awards

2008 Graduate Teaching Excellence Award – Texas State University, Department of Mathematics

SCHOLARLY & CREATIVE WORKS

Works in Print

Refereed Journal Articles

Ward, D. D. & Gerber, L. N. (2017). Encouraging psychosocial wellness in developmental mathematics. *MathAMATYC Educator*, 9(1), 34-39.

Gerber, L.N. & Ward, D. D. (2016). Classroom for the Millennials: An Approach for the Next Generation. *NADE Digest*, 9(1), 23-26.

Mireles, S. V., Offer, J. A., Ward, D. D., & Dochen, C. (2011). Incorporating study strategies in developmental mathematics/college algebra. *Journal of Developmental Education*, 34(3).

Mireles, S. V., Westbrook, T., Ward, D. D., & Diaz, C. (2013). An investigation of technological options in developmental mathematics. *MathAMATYC Educator*, 4(2), 57-62.

Mireles, S. V., Westbrook, T., Ward, D. D., Goodson, J., & Jung, J. H. (2013). Implementing pre-homework in the developmental mathematics classroom. *Research and Teaching in Developmental Education*, 29(2), 5-13.

Non-refereed Journal Articles

Gerber, L. & Ward, D. (2018). Making math meaningful (M^3). *NADE Math Monograph*, 3-4.

Works not in Print

Papers Presented at Professional Meetings

“Mathematical Literacy in Developmental Mathematics.” American Mathematical Association of Two-Year Colleges 45th Annual Conference. Milwaukee, WI. November 14-17, 2019.

“FUNdamentals of Fractions.” National Council of Teachers of Mathematics Regional Conference. Salt Lake City, UT. October 16-18, 2019.

“SOS! Student Originated Statistics.” National Association for Developmental Education 43rd Annual Conference. Atlanta, GA. March 6-10, 2019.

“Hands-On Learning Activities in Quantitative Literacy Courses.” American Mathematical Association of Two-Year Colleges 44th Annual Conference. Lake Buena Vista, FL. November 15-18, 2018.

“Hands-On Learning Activities in Quantitative Literacy Courses.” Utah Mathematical Association of Two-Year Colleges 2018 Annual Conference. Salt Lake City, UT. October 13, 2018.

“Developing Teachers: Engaging Pre-Service Teachers Enrolled in Developmental Mathematics.” National Association for Developmental Education 41st Annual Conference. Oklahoma City, OK. March 1-4, 2017.

“Addressing Psychosocial Wellness in Developmental Mathematics.” Southwest Association for Developmental Education 22nd Annual Conference. Sandy, UT. November 11, 2016.

“Addressing Psychosocial Wellness in Developmental Mathematics.” National Association for Developmental Education 40th Annual Conference. Anaheim, CA. March 16-19, 2016.

“Addressing Psychosocial Wellness in Developmental Mathematics.” Oklahoma Association for Developmental Education Annual Conference. Tulsa, OK. October 29-30, 2015.

“Classroom for the Millennials: An Approach for the Next Generation.” National Association for Developmental Education 39th Annual Conference. Greenville, SC. February 25-28, 2015.

“The Wisdom of Using Technology and Manipulatives in Developmental Mathematics.” National Association for Developmental Education 36th Annual Conference. Orlando, FL. February 21-25, 2012.

“The Wisdom of Using Technology and Manipulatives in Developmental Mathematics.” Texas College Reading and Learning Association Annual Conference. San Antonio, TX. November 22-25, 2011.

“The Wisdom of Using Technology and Manipulatives in Developmental Mathematics.” College Academic Support Programs 30th Annual Conference. Austin, TX. October 23-25, 2011.

“The College Readiness Standards and Developmental Mathematics Curriculum.” College Academic Support Programs 28th Annual Conference. San Antonio, TX. October 21-23, 2009.

“Effects of Algebrator Software in Developmental Mathematics.” National Association for Developmental Education 33rd Annual Conference. Greensboro, NC. February 25-28, 2009.

“Effects of Algebrator Software in Developmental Mathematics.” College Reading and Learning Association 41st Annual Conference. Cleveland, OH. October 22-25, 2008.

Invited Talks, Lectures, and Presentations

“Encouraging Mathematical Literacy in the Developmental Mathematics Classroom.” Office of Teaching and Learning’s Scholarship of Teaching and Learning Faculty Presentations. Utah Valley University, Orem, UT. April 12, 2019 .

“Cultivating Savvy Consumers of (mis)Information.” 2018 Ethics Awareness Week. Utah Valley University, Orem UT. September 24-28, 2018.

“Addressing Psychosocial Wellness in Developmental Mathematics.” Cameron University departmental Mathematics Seminar. Lawton, OK. November 14, 2015.

“Twisted Mathematics.” Presented at Montana State University to middle school students attending Expanding Your Horizons. April 30, 2011.

“Math 1311 Curriculum and the College and Career Readiness Standards.” Presented at Texas State University to students enrolled in Math 5111 and 7111 (Teaching Seminar). September 29, 2009.

“Effects of Algebrator Software in Developmental Mathematics.” Texas State University departmental Mathematics Education Seminar. San Marcos, TX. October 17, 2008.

Grants and Contracts

Summer 2018

STEM Action Center Utah – \$1500
“UVU Math Adventure Camp” (Co-PI)

Summer 2017

STEM Action Center Utah – \$2160
“UVU Math Adventure Camp” (Co-PI)

Summer 2016

STEM Action Center Utah – \$2500
“UVU Math Adventure Camp” (Co-PI)

Fall 2014 – Spring 2015

Cameron University Innovative Instruction Grant – \$10,800
“There’s an App for Math” (Primary Investigator)

Fall 2008 – Summer 2010

U.S. Department of Education – Title V College Cost Reduction Access Act (CCRAA) –
\$2,377,978 (~\$300,000 – Texas State)
“*Puentes: A Partnership to Improve Access to the Baccalaureate for South Texans through
Science, Technology, Engineering, and Math (STEM) Teaching and Learning Innovation*”
(Lab Evaluator)

Summer 2008

Texas Higher Education Coordinating Board – Intensive Summer Program – \$98,059
“Math FOCUS: Fundamentals of Conceptual Understanding & Success” (Grant Coordinator)

SERVICE

Professional

Fall 2019-Spring 2020 – President, UMATYC Executive Board
Utah Mathematical Association of Two-Year Colleges

Fall 2018-Spring 2019 – President-Elect, UMATYC Executive Board
Utah Mathematical Association of Two-Year Colleges

Fall 2018 – Conference Proposal Reviewer
National Association for Developmental Education

Fall 2017-Spring 2018 – President, SWADE Executive Board
Southwest Association for Developmental Education

Fall 2016-Spring 2017 – President-Elect, SWADE Executive Board
Southwest Association for Developmental Education

Summer 2016-Fall 2017 – Lead SME for Assessment, Beyond Crossroads Impact Project
American Mathematical Association of Two-Year Colleges

State Regents Mathways Task Force – Fall 2015 through Spring 2016
Oklahoma State Regent for Higher Education

University, College, and Department

Spring 2019-Present – Member, Teaching Effectiveness Committee
Utah Valley University

Fall 2018-Spring 2019 – Department representative for transfer articulation
Utah Valley University, Developmental Mathematics

Fall 2018-Spring 2019 – Chair, Developmental Math Curriculum Committee
Utah Valley University, Developmental Mathematics

Fall 2018-Spring 2019 – Member, MAT 1000/1010 Curriculum Committee
Utah Valley University, Developmental Mathematics

Fall 2018 – Faculty Advisor, Phi Theta Kappa Honor Society
Utah Valley University, University College

Fall 2017-Present – Member, MATH 2000 Course Development Committee
Utah Valley University, Mathematics Department

Fall 2017-Spring 2019 – Representative, Service and Elections Committee
Utah Valley University, University College

Fall 2017-Spring 2018 – Member, Assessment and Strategic Plan Committee
Utah Valley University, Developmental Mathematics

Spring 2017-Spring 2018 – Member, Gateway Course Initiative Committee
Utah Valley University, Developmental Mathematics

Fall 2016-Spring 2019 – Member, MAT 1030 Quantitative Reasoning Curriculum Committee
Utah Valley University, Developmental Mathematics

Fall 2015-Spring 2016 – Chair, HLC Subcommittee for Remediation and Placement
Cameron University

Fall 2014-Spring 2015 – Secretary, Faculty Senate
Cameron University

Summer 2014-Spring 2016 – Member, HLC Academy for Student Persistence and Completion
Cameron University

Spring 2014-Spring 2016 – Pi Mu Epsilon Faculty Representative
Cameron University, Department of Mathematical Science

Community

Spring 2018 – Presenter, Expanding Your Horizons

Summer 2018 – Facilitator, UVU Math Adventure Camp

Summer 2017 – Facilitator, UVU Math Adventure Camp