

# Curriculum Vitae

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## Alan R. Parry

### CONTACT INFORMATION

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Orem, UT 84058	

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### EDUCATION

<b>PhD</b>	Mathematics	Duke University Advisor: Hubert L. Bray	2013
<b>MA</b>	Mathematics	Duke University	2008
<b>MS</b>	Mathematics	Utah State University Advisor: Ian M. Anderson	2007
<b>BS</b>	Mathematics	Utah State University Magna Cum Laude	2006

### PROFESSIONAL APPOINTMENTS/EMPLOYMENT

Utah Valley University - Mathematics	Associate Professor	2021 - present
Brigham Young University - Mathematics	Visiting Associate Professor	2024 - 2025
Utah Valley University - Mathematics	Department Chair	2021 - 2024
Utah Valley University - Mathematics	Associate Chair	2018 - 2021
Utah Valley University - Mathematics	Assistant Professor	2016 - 2021
University of Connecticut - Mathematics	Visiting Assistant Professor	2013 - 2016

## RESEARCH INTERESTS

Election Theory, Mathematics Education, Differential Geometry, General Relativity, Mathematical Physics

## PUBLICATIONS

### Refereed Journal Articles

**2025** Alan Parry, Daniel Havens, Michael Gundlach, Wiktor Mogilski, and Joe Simons, *Analysis Paralysis: On the Potential Overemphasis of Calculus and Analysis in the Undergraduate and Graduate Mathematics Curricula*, accepted, to appear in the Proceedings of the 28<sup>th</sup> Annual Conference on Research in Undergraduate Mathematics Education

Wiktor Mogilski and Alan Parry, *Reflective Homework System in Mathematics Courses*, Journal of Mathematics Education at Teachers College, **16** (1), 56-68, (2025), available at <https://journals.library.columbia.edu/index.php/jmetc/article/view/12575>.

**2022** Alan R. Parry, *Parametrizations of the Poisson-Schrödinger Equations*, Canadian Journal of Physics, **100** (1), 27-38, (2022), available at <https://doi.org/10.1139/cjp-2020-0213>.

**2018** Alan R. Parry, *A Useful Observation about the Unit Circle*, Utah Mathematics Teacher, **11**, 31-33, Fall/Winter 2018-2019, available at [http://uctmarchive.weebly.com/uploads/2/6/4/7/26475011/uctm\\_journal\\_2018.pdf](http://uctmarchive.weebly.com/uploads/2/6/4/7/26475011/uctm_journal_2018.pdf).

Alan R. Parry, *Graph Transformations by Variable Replacement*, Utah Mathematics Teacher, **11**, 34-48, Fall/Winter 2018-2019, available at [http://uctmarchive.weebly.com/uploads/2/6/4/7/26475011/uctm\\_journal\\_2018.pdf](http://uctmarchive.weebly.com/uploads/2/6/4/7/26475011/uctm_journal_2018.pdf).

**2015** Hubert L. Bray and Alan R. Parry, *Modeling Wave Dark Matter in Dwarf Spheroidal Galaxies*, Journal of Physics: Conference Series, **615**, 012001, (2015), available at <http://dx.doi.org/10.1088/1742-6596/615/1/012001>.

**2014** Alan R. Parry, *A Survey of Spherically Symmetric Spacetimes*, Analysis and Mathematical Physics, **4**, 333-375, (2014), available at <http://dx.doi.org/10.1007/s13324-014-0085-x>.

### Research Reports and White Papers (not peer-reviewed)

**2025** John Kidd and Alan Parry, *Research Update: Increased Error Rates in RCV and the Impact on Election Outcomes*, Gary R. Herbert Institute for Public Policy, (2025), available at <https://www.uvu.edu/herbertinstitute/docs/addressing-increased-error-rates.pdf>

**2024** Alan Parry and John Kidd, *Addressing Concerns About Instant Runoff Voting*, Gary R. Herbert Institute for Public Policy, (2024), available at [https://www.uvu.edu/herbertinstitute/docs/web\\_final\\_addressing\\_concerns\\_about\\_rcv\\_utah.pdf](https://www.uvu.edu/herbertinstitute/docs/web_final_addressing_concerns_about_rcv_utah.pdf)

John Kidd and Alan Parry, *An Evaluation of the Ranked-Choice Voting Pilot in Utah*, Gary R. Herbert Institute for Public Policy, (2024), available at [https://www.uvu.edu/herbertinstitute/docs/evaluation\\_of\\_rcv\\_pilot.pdf](https://www.uvu.edu/herbertinstitute/docs/evaluation_of_rcv_pilot.pdf)

Alan Parry and John Kidd, *Summary of Recent Reports on Ranked-Choice Voting*, Gary R. Herbert Institute for Public Policy, (2024), available at [https://www.uvu.edu/herbertinstitute/docs/summar\\_rcv.pdf](https://www.uvu.edu/herbertinstitute/docs/summar_rcv.pdf)

Alan Parry and John Kidd, *Deficiencies in Recent Research on Ranked Choice Voting Ballot Error Rates*, Institute for Mathematics and Democracy, (2024), available at <https://mathematics-democracy-institute.org/deficiencies-in-recent-research-on-ranked-choice-voting-ballot-error-rates/>

**2023** Alan Parry, *Presentation of Election Results in Ranked Choice Voting and Voter Confidence*, Gary R. Herbert Institute for Public Policy, (2023), available at <https://www.uvu.edu/herbertinstitute/docs/2024rankedchoicevoting.pdf>.

Rachel Hutchinson and Alan Parry, *What if Voters Don't Rank All the Candidates? Inactive Ballots in Single-Choice vs. Instant Runoff Voting*, Herbert Institute for Public Policy and FairVote.org, (2023), available at <https://www.uvu.edu/herbertinstitute/docs/2024inactiveballots.pdf>.

## Theses

**2013** Alan R. Parry, *Wave Dark Matter and Dwarf Spheroidal Galaxies*, PhD Thesis, Duke University, Durham, NC, (2013), available at <http://arxiv.org/abs/1311.6087>.

**2007** Alan R. Parry, *A Classification of Real Indecomposable Solvable Lie Algebras of Small Dimension with Codimension One Nilradicals*, Master's Thesis, Utah State University, Logan, UT, (2007), available at <http://arxiv.org/abs/1311.6069>.

## ArXiv

**2012** Alan R. Parry, *Spherically Symmetric Static States of Wave Dark Matter*, (2012, updated 2015), available at <http://arxiv.org/abs/1212.6426>.

## Papers in Preparation

Alan R. Parry and Bob Palais, *Given Any Two Statements, One of Them Implies the Other*, in preparation

## **AWARDS, HONORS, DISTINCTIONS**

- 2022** Board of Trustees Award of Excellence  
Utah Valley University, February 2022
- 2019** Faculty Excellence Award  
Utah Valley University, April 2019
- 2018** Fellow of the Higher Education Academy  
Higher Education Academy, June 2018
- 2010** L.P. and Barbara Smith Award for Teaching Excellence  
Duke University Mathematics Department, September 2010
- 2009** L.P. and Barbara Smith Award for Beginning Teachers  
Duke University Mathematics Department, February 2009
- 2007** Math and Stat Graduate Research Award  
Utah State University Mathematics and Statistics Department, April 2007
- Math and Stat Graduate Teaching Award  
Utah State University Mathematics and Statistics Department, April 2007
- 2006** Senior Academic Achievement Award  
Utah State University Mathematics and Statistics Department, April 2006
- 2001** University Club Scholarship  
Utah State University, 2001
- Robert C. Byrd Scholarship  
Utah State Board of Education, 2001

## **CERTIFICATIONS**

- 2020** UVU Online Teaching Certification, May 2020

## **GRANTS**

- 2019** Alan R. Parry, Presenting at the Joint Mathematics Meeting 2020, Faculty Senate  
Faculty Development Committee Travel Grant Award, October 31, 2019, Travel to:  
Joint Mathematics Meetings, Denver, CO, January 15-18, 2020, Amount: \$600.

**2018** Alan R. Parry, *Contributing to the Differential Geometry Package in Maple - Yang Mills Solutions*, UVU Grants for Engaged Learning Quick Grant, August 16, 2018, Amount: \$1,318.24.

Alan R. Parry, *Contributing to the Differential Geometry Software and Databases in Maple*, UVU Grants for Engaged Learning Quick Grant, June 5, 2018, Amount: \$1,320.

Alan R. Parry, *Contributing to the Differential Geometry Software and Databases in Maple*, UVU College of Science Scholarly Activities Committee Scholarly Activities Grant, April 18, 2018, Amount: \$1,200.

Alan R. Parry, *Contributing to the Differential Geometry Software and Databases in Maple*, UVU College of Science Scholarly Activities Committee Summer Stipend Award, April 11, 2018, Amount: \$3,590.

## GRANTS AWARDED TO SUPERVISED STUDENTS

**2019** Eli Atkin (supervised by Alan R. Parry), *Creating a Database of Yang-Mills Solutions for the Differential Geometry Package in Maple*, UVU College of Science Scholarly Activities Travel Grant, April 2, 2019, Travel to: American Physical Society April Meeting, April 13-16, 2019, Amount: \$922

**2018** Eli Atkin, Ryan Bevan (supervised by Alan R. Parry), *Creating a Database of Yang-Mills Solutions for the Differential Geometry Package in Maple*, UVU College of Science Scholarly Activities Committee Travel Grant, November 26, 2018, Travel to: Joint Mathematics Meetings, Baltimore, MD, January 16-19, 2019, Amount: \$1,780.

Eli Atkin, Ryan Bevan, (supervised by Alan R. Parry), *Contributing to the Differential Geometry Software and Databases in Maple - Training REU*, UVU College of Science Activities Committee Travel Grant, May 3, 2018, Travel to Dixie State University, May 11-12, 2018, Amount: \$454.

## TALKS

**2025** *Do We Vote the Wrong Way?*,  $t^3$ : tea time talks, Utah Valley University, December 3, 2025

*Do We Vote the Wrong Way?*, BYU Mathematics Undergraduate Colloquium, Brigham Young University, November 12, 2025

*Do We Vote the Wrong Way?*, MAA Intermountain Section Speaker Program, Online, October 7, 2025

*Addressing Concerns About Ranked Choice Voting*, with John Kidd, Vineyard City Council Meeting, March 26, 2025

*Utah's Launch Years Story*, 24<sup>th</sup> Annual UAMTE Conference, Utah State University Eastern, March 22, 2025

*Survey Research on Utah Pilot Program*, with John Kidd, FairVote Academic Working Group Meeting, February 19, 2025

*An Analysis of Utah's Ranked Choice Voting Pilot Program*, with John Kidd, Webinar, Gary R. Herbert Institute for Public Policy, Utah Valley University, January 24, 2025, entire webinar available on YouTube at [https://youtu.be/IGzx2J5W-\\_0?si=dgn0xv1XC\\_Ph47D2](https://youtu.be/IGzx2J5W-_0?si=dgn0xv1XC_Ph47D2)

*Analysis Paralysis: Modern Opportunities to Reconsider the Mathematics Curriculum at All Levels*, 2025 Joint Mathematics Meetings, Seattle, WA, January 8, 2025

**2024** *Do We Vote the Right Way?*, Mathematics Monday: Math Factor/Math Department Seminar, Weber State University, October 21, 2024

*Evaluating Utah's Ranked Choice Voting Pilot Program*, Utah State Legislature Political Subdivisions Interim Committee, Utah State Capitol, October 16, 2024, entire committee meeting available at <https://le.utah.gov/av/committeeArchive.jsp?mtgID=19464> (this presentation starts about 1 hour into the meeting)

*Analysis Paralysis: Modern Opportunities to Reconsider the Mathematics Curriculum at All Levels*, MAA Intermountain Section Meeting 2024, Westminster University, March 30, 2024

*Modern Opportunities to Reconsider the Mathematics Curriculum at All Levels*, BYU Math Colloquium, Brigham Young University, January 16, 2024

**2023** *What if Voters Don't Rank all the Candidates?*, with Rachel Hutchinson, RCV Network Meeting, November 15, 2023

*Analysis is Wrong!*, MAA Intermountain Section Meeting, Utah Tech University, March 25, 2023

**2022** *The Mathematics of Ranked Choice Voting*, Universal, Utah Valley University, November 2, 2022, entire talk available on YouTube at <https://youtu.be/wNysAyRioK0>

*Science Uses Math! - A Story Told with Lots of XKCD Comics*, Future Science Student Day, Utah Valley University, April 15, 2022

*A Pictorial Introduction to General Relativity*, Mathematics Colloquium, Utah Valley University, March 18, 2022, entire talk available on YouTube at <https://youtu.be/jWa-D-v0pyk>

*Master of Science in Mathematics Education at Utah Valley University*, with Debanjan Bhattacharjee, Christine Walker, and Yingxian Zhu, UCTM 2022 Annual Conference, Davis High School, February 26, 2022

*Given Any Two Statements, One of Them Implies the Other*, with Bob Palais,  $t^3$ : tea time talks, Utah Valley University, February 7, 2022

**2021** *Mathematics is Universal*, Universal, Utah Valley University, September 16, 2021

*What is Ranked Choice Voting?*,  $t^3$ : tea time talks, Utah Valley University, September 15, 2021

*Given Any Two Statements, One of Them Implies the Other*, MAA Intermountain Section Meeting, Brigham Young University - Idaho, Virtual Conference, March 26, 2021

**2020** *Using Whiteboard/Visualizer in Live Stream*, Teaching with Technology Tune-up, Utah Valley University, November 5, 2020

*Normal Vectors and Space Curves*, 2020 Joint Mathematics Meetings, Denver, CO, January 17, 2020

**2019** *The Day Gravity and Curvature Met*, Roots of Knowledge Lecture Series, Utah Valley University, November 14, 2019, entire talk available on YouTube at [https://www.youtube.com/watch?v=3t\\_Y35iwiVM](https://www.youtube.com/watch?v=3t_Y35iwiVM)

*Wibbly-Wobbly Timey-Wimey Geometry*, 2019 UMATYC Conference, Utah Valley University, November 2, 2019

*Skiing Deeper into Slope*, with Jennifer Hooper, NCTM 2019 Regional Conference, Salt Lake City, UT, October 18, 2019

*The Generalized Stokes Theorem*, Mathematics Colloquium, Utah Valley University, April 19, 2019, entire talk available on YouTube at <https://www.youtube.com/watch?v=8-kH8LPtjjo>

**2018** *A Useful Observation of the Unit Circle*, UCTM 2018 Annual Conference, Draper Park Middle School, October 12-13, 2018

**2017** *The Cat in the Hat is a Little Abstract*, Mathematics Colloquium, Utah Valley University, November 10, 2017, entire talk available on YouTube at <https://www.youtube.com/watch?v=lg99onjzbNI>

*Classifying Solvable Lie Algebras*, 2<sup>nd</sup> Annual Idaho/Utah Geometry Rendezvous, Idaho State University, October 28, 2017

*Who Has the Power?*, Mathematics Colloquium, Utah Valley University, March 31, 2017, entire talk available on YouTube at <https://www.youtube.com/watch?v=dNxqdIGaWIw>

*The Courtship of Freedom and Manipulation: An Immutable Union*, Mathematics Colloquium, Utah Valley University, March 17, 2017, entire talk available on YouTube at <https://www.youtube.com/watch?v=jWIEdSJqASk>

*Manipulation, Lies, and Elections*, Mathematics Colloquium, Utah Valley University, March 10, 2017, entire talk available on YouTube at <https://www.youtube.com/watch?v=oSaCubC1U1U>

**2016** *Wave Dark Matter and Galactic Dynamics*, Mathematics Colloquium, Utah Valley University, November 18, 2016

*A Pictorial Introduction to General Relativity*, Mathematics Colloquium, Utah Valley University, November 11, 2016

*Classifying Low-Dimensional Solvable Lie Algebras*, DG Rendezvous 2016, Utah State University, November 5, 2016

*Wibbly-Wobbly Timey-Wimey Geometry*, Mathematics Colloquium, Utah Valley University, November 4, 2016

*Black Holes Suck!*, UConn Physics Club, University of Connecticut, April 8, 2016

*Parametrizations of the Poisson-Schrödinger Equations in Spherical Symmetry*, AMS Sectional Meeting: Special Session on Mathematical General Relativity, SUNY Stony Brook, March 19-20, 2016

*Geometric Flows in General Relativity*, AMS Sectional Meeting: Special Session on PDE Methods in Geometric Flows, SUNY Stony Brook, March 19-20, 2016

*The Einstein-Klein-Gordon Equations and Wave Dark Matter*, California State University - Sacramento, February, 23, 2016

*Wibbly-Wobbly Timey-Wimey Geometry*, Undergraduate Talk, Texas Christian University, February 18, 2016

*A Light in the Darkness: What Curvature has to do with Dark Matter*, Mathematics Colloquium, Brigham Young University, January 28, 2016

**2015** *Shedding Light on Dark Matters*, PDE and Differential Geometry Seminar, University of Connecticut, December 7, 2015

*Wibbly-Wobbly Timey-Wimey Geometry*, UConn Math Club, University of Connecticut, September 16, 2015

*Wave Dark Matter and Galactic Dynamics*, RIT Astrophysics Group Lunch Seminars, Rochester Institute of Technology, March 18, 2015

**2014** *Gravitational Monsters in the Dark*, UConn Astronomy Association, University of Connecticut, November 18, 2014



*Black Holes Suck!*, S.I.G.M.A. Seminar, University of Connecticut, November 14, 2014

*Modeling Wave Dark Matter in Dwarf Spheroidal Galaxies*, IARD 2014, University of Connecticut, June 9-13, 2014

*Wibbly-Wobbly (and Perhaps Timey-Wimey) Geometry*, Early College Experience Recertification Workshop, University of Connecticut, May 19, 2014

**2013** *A Pictorial Introduction to General Relativity*, UConn Math Club, University of Connecticut, October 23, 2013

*Understanding the Gravity of the Situation*, S.I.G.M.A. Seminar, University of Connecticut, September 27, 2013

*Mathematics Meets Astrophysics: An Overview of General Relativity and Dark Matter in Galaxies*, PDE Seminar, Vanderbilt University, April 12, 2013

*Modeling Wave Dark Matter in Dwarf Spheroidal Galaxies*, High-Energy Theory and Cosmology Seminar, Vanderbilt University, April 12, 2013

*Mathematics Meets Astrophysics: An Overview of General Relativity and Dark Matter in Galaxies*, PDE and Differential Geometry Seminar, University of Connecticut, April 1, 2013

*Mathematics Meets Astrophysics: An Overview of General Relativity and Dark Matter in Galaxies*, Mathematics Colloquium, Brigham Young University, February 7, 2013

**2012** *Modeling Wave Dark Matter in Dwarf Spheroidal Galaxies*, Miami 2012, Sponsored by the Physics Department at the University of Miami, December 13-20, 2012

*Modeling Wave Dark Matter in Dwarf Spheroidal Galaxies*, Math-Physics Colloquium, Lafayette College, October 3, 2012

*A Pictorial Introduction to General Relativity*, Mathematical Adventures and Diversions Talk, Lafayette College, October 3, 2012

*Modeling Wave Dark Matter in Dwarf Spheroidal Galaxies*, Geometry and Physics Seminar, University of Miami, September 26, 2012

*Modeling Wave Dark Matter in Dwarf Spheroidal Galaxies*, Geometry/Topology Seminar, Duke University, September 4, 2012

*Crazy Cosmological Correlations and How General Relativity Has and Might Continue to Explain Them*, Graduate/Faculty Seminar, Duke University, April 20, 2012

*Dark Matter Matters*, First Annual Math Slam, Duke University, March 23, 2012

## PANELS

**2024** *What Do Utahns Think About Elections?*, The Election Trust Forum, Gary R. Herbert Institute for Public Policy, Utah Valley University, May 7, 2024, Role: Panel Moderator

*Municipal Ranked Choice Elections: Lessons Learned from the Pilot*, Utah Ranked Choice Voting, February 12, 2024, Role: Panel Member and Speaker

*Herbert Panel: Elections Security and Voter Confidence in the 2024 Election*, Gary R. Herbert Institute for Public Policy, Utah Valley University, January 29, 2024, Role: Panel Member and Speaker

**2015** *Preparing for Math Graduate School Panel Discussion*, UConn Math Club, University of Connecticut, April 22, 2015, Role: Panel Member

## MEDIA APPEARANCES

**2025** *Interview with Instant Runoff Voting Mathematician Dr. Alan Parry*, Long Live Alternative Parties Podcast, August 30, 2025, available at <https://youtu.be/VQaqzjQ5n2M?si=WGk04rbTKLYiceJe>

*Mathematics professor explains ranked choice voting* by Roger Goldman, Interview with Alan Parry, KPCW, February 21, 2025, available at <https://www.kpcw.org/show/local-news-hour/2025-02-21/mathematics-professor-explains-ranked-choice-voting>

**2024** *Study from Utah Valley University refutes No on 3 campaign's claims of ballot errors caused by voter confusion* by Molly Ellery, Report on Kidd and Parry paper *Deficiencies in Recent Research on Ranked Choice Voting Ballot Error Rates*, WJHL.com, October 22, 2024, available at <https://www.wjhl.com/business/press-releases/einpresswire/753618614/study-from-utah-valley-university-refutes-no-on-3-campaigns-claims-of-ballot-errors-caused-by-voter-confusion/>

*Opinion: Why are Utah lawmakers set to abandon ranked choice voting?* by Jay Evensen, Result of Interview with Alan Parry, Deseret News, February 16, 2024, available at <https://www.deseret.com/opinion/2024/2/16/24074274/utah-ranked-choice-voting-conservatives/>

*Report says confidence in ranked choice voting could be improved through better data*, by Logan Stefanich, Report on January 2024 Herbert Institute Panel, KSL.com, January 31, 2024, available at <https://www.ksl.com/article/50861126/report-says-confidence-in-ranked-choice-voting-could-be-improved-through-better-data>

## ACADEMIC CONFERENCES

### Organizer

- 2022** MAA Intermountain Section Meeting, Utah Valley University, March 25-26, 2022, Role: Organizing Committee Member
- 2018** Learning to Use Maple Research Experience for Undergraduates, Dixie State University, May 11-12, 2018, Role: Co-organizer with Dr. Jesse Hicks and Presenter

### Speaker

- 2025** 24<sup>th</sup> Annual UAMTE Conference, Utah State University Eastern, March 22, 2025, Role: Speaker
- 2025 Joint Mathematics Meetings, Seattle, WA, January 8-11, 2025, Role: Speaker
- 2024** MAA Intermountain Section Meeting, Westminster University, March 29-30, 2024, Role: Speaker
- 2023** MAA Intermountain Section Meeting, Utah Tech University, March 24-25, 2023, Role: Speaker
- 2022** UCTM 2022 Annual Conference, Davis High School, February 26, 2022, Role: Speaker
- 2021** MAA Intermountain Section Meeting, Brigham Young University - Idaho, Virtual Conference, March 26-27, 2021, Role: Speaker
- 2020** Teaching with Technology Tune-up (T3), Utah Valley University, November 2-15, 2020, Role: Speaker
- 2020 Joint Mathematics Meetings, Denver, CO, January 15-18, 2020, Role: Speaker, Session Moderator, and Undergraduate Poster Judge
- 2019** 2019 UMATYC Conference, Utah Valley University, November 2, 2019, Role: Speaker
- NCTM 2019 Regional Conference, Salt Lake City, UT, October 18, 2019, Role: Speaker
- 2018** UCTM 2018 Annual Conference, Draper Park Middle School, October 12-13, 2018, Role: Speaker
- 2017** 2<sup>nd</sup> Annual Idaho/Utah Geometry Rendezvous, Idaho State University, October 27-28, 2017, Role: Speaker
- 2016** DG Rendezvous 2016, Utah State University, November 4-5, 2016, Role: Speaker
- AMS Sectional Meeting, SUNY Stony Brook, March 19-20, 2016, Role: Speaker at Special Sessions on Mathematical General Relativity and on PDE Methods in Geometric Flows

**2014** IARD 2014 - The 9<sup>th</sup> Biennial Conference on Classical and Quantum Relativistic Dynamics of Particles and Fields, University of Connecticut, June 9-13, 2014, Role: Speaker

**2012** Miami 2012 - A Topical Conference on Elementary Particles, Astrophysics, and Cosmology, Sponsored by the Physics Department at the University of Miami, December 13-20, 2012, Role: Speaker

## **Staff**

**2012** MSRI Summer Graduate Workshop on Mathematical General Relativity, MSRI, July 9-20, 2012, Role: Teaching Assistant

27<sup>th</sup> Annual Geometry Festival, Duke University, April 27-29, 2012, Role: Attendee/  
Technology Liaison

## **Attendee**

**2025** Launch Years Initiative Learning Exchange, Charles A. Dana Center, University of Texas at Austin, Austin, TX, February 27-28, 2025, Role: Attendee (Utah state team member)

**2024** Launch Years Initiative State Math Pathways Learning Exchange, Charles A. Dana Center, Anaheim, CA, February 5-6, 2024, Role: Attendee (Utah state team member)

**2023** Building a Conservative Agenda for Democracy: National Conference, SNF Agora Institute at Johns Hopkins and R Street Institute, Washington DC, November 6-8, 2023, Role: Attendee

Scaling Data Science in Utah: State Data Science Education Summit, DOMO, American Fork, UT, September 12, 2023, Role: Attendee

**2022** Launch Years Initiative All-State Kickoff, Charles A. Dana Center, The University of Texas at Austin, November 2-3, 2022, Role: Attendee (Utah state team member)

**2019** MAA Intermountain Section Meeting, Southern Utah University, April 12-13, 2019, Role: Attendee

CUR: Broadening Participation Institute, Whitworth University, March 22-24, 2019, Role: Attendee

UCUR 2019, 13<sup>th</sup> Annual Utah Conference on Undergraduate Research, Weber State University, February 22, 2019, Role: Attendee/Faculty Mentor to Student Presenters

2019 Joint Mathematics Meetings, Baltimore, MD, January 17-19, 2019, Role: Attendee and Undergraduate Poster Judge

**2018** MAA Intermountain Section Meeting, Utah State University, March 23-24, 2018, Role: Attendee

2<sup>nd</sup> Annual Intermountain Teaching for Learning Conference, Nevada State College, March 15-16, 2018, Role: Attendee

**2017** ALEKS Symposium, Denver, CO, April 7, 2017, Role: Attendee

**2016** 2016 Joint Mathematics Meetings, Seattle, WA, January 6-9, 2016, Role: Attendee

**2013** PCMI Graduate Summer School 2013, PCMI, June 30 - July 20, 2013, Role: Attendee/Student

43<sup>rd</sup> Barrett Memorial Lectures on the Proof of the Willmore Conjecture, University of Tennessee, Knoxville, May 4-5, 2013, Role: Attendee

2013 Joint Mathematics Meetings, San Diego, CA, January 9-12, 2013, Role: Attendee

**2012** Southeastern Geometry Seminar XXI, University of Tennessee, Knoxville, December 9, 2012, Role: Attendee

**2011** 41<sup>st</sup> Barrett Memorial Lectures in Mathematical Relativity, University of Tennessee, Knoxville, May 11-14, 2011, Role: Attendee

## SCHOLARLY YOUTUBE VIDEO CONTENT

### Scholar Sauce

**2025** *Merry Mathmas Carols!*, December 1, 2025, Video Link

*Every Type of Math in 42 Minutes (Compilation)*, November 1, 2025, Video Link

*Math Professor and his Computer Science Major Son React to Animation vs. Coding*, September 12, 2025, Video Link

*5 Math Terms that Were Named Wrong*, May 31, 2025, Video Link

*Math Professor Reacts to Animation vs. Physics*, April 14, 2025, Video Link

*When  $\pi$  is NOT  $\pi$ ?*, March 14, 2025, Video Link

*Pythagorean Theorem in a Trapezoid?!? - The Pythagorean President*, February 19, 2025, Video Link

*5 Reasons Why  $0.999$  Repeated = 1*, February 7, 2025, Video Link

*Using Math to Reorganize the NFL Playoffs*, February 4, 2025, Video Link

*Math Professor Reacts to Animation vs. Math*, January 21, 2025, Video Link

*From Whence Came the Quadratic Formula?*, January 4, 2025, Video Link

**2024** *Something Awesome is Coming this Year!*, December 27, 2024, Video Link (This is a trailer for the channel to attract new viewership.)

*Every Type of Math in 7 Minutes - Part 5: Statistics*, December 23, 2024, Video Link

*Every Type of Math in 7 Minutes - Part 4: Discrete Mathematics*, December 12, 2024, Video Link

*Every Type of Math in 9 Minutes - Part 3: Geometry and Topology*, November 29, 2024, Video Link

*Every Type of Math in 11 Minutes - Part 2: Algebra*, November 18, 2024, Video Link

*Every Type of Math in 7 Minutes - Part 1: Calculus and Analysis*, November 10, 2024, Video Link

*Do We Vote the Wrong Way?*, November 3, 2024, Video Link

*Math Professor Reacts to Animation vs. Geometry*, July 23, 2024, Video Link

*Every Number Does This!*, **Short**, April 26, 2024, Video Link

*Weird Ways to Use Calculators...*, **Short**, April 19, 2024, Video Link

*The Amazing World of Sad Numbers (And Happy Ones Too)!*, **Short**, April 12, 2024, Video Link

*How to Win Let's Make a Deal!*, **Short**, March 22, 2024, Video Link

*What the Heck Does Infinite Even Mean?*, **Short**, March 15, 2024, Video Link

*Does the Bible Get  $\pi$  Wrong?*, March 14, 2024, Video Link

*An Odd Place for Euler's Number...*, **Short**, March 8, 2024, Video Link

*No Deck of Cards Has Been Shuffled the Same Way Twice!*, **Short**, March 1, 2024, Video Link

*Math Facts That Sound Fake But Are Actually True! - Part 3*, February 26, 2024, Video Link

*I Bet Two of You Have the Same Birthday!*, **Short**, February 23, 2024, Video Link

*Polynomials that You Can't Solve?!?*, **Short**, February 16, 2024, Video Link

*What was Fermat's Last Theorem?*, **Short**, February 9, 2024, Video Link

*How to Make a Möbius Strip and a Klein Bottle*, **Short**, February 2, 2024, Video Link

*How Big is a Googol?*, **Short**, January 26, 2024, Video Link

*$i^i$  is a Real Number?!?*, **Short**, January 19, 2024, Video Link

*The Coolest Fact I Know!*, **Short**, January 12, 2024, Video Link

*Some Infinite Sums Can Add to Anything!*, **Short**, January 5, 2024, Video Link

**2023** *0.999 Repeated = 1?*, **Short**, December 29, 2023, Video Link

*What's the Deal with Euclid's Vth Postulate? (Part 2)*, December 28, 2023, Video Link

*An Infinite Number of Mathematicians Walk Into a Bar...*, **Short**, December 22, 2023, Video Link

*What's the Deal with Euclid's Vth Postulate? (Part 1)*, December 21, 2023, Video Link

*An Infinite Number of Tasks?*, **Short**, December 15, 2023, Video Link

*How Many Convex Regular Polyhedra Are There?*, **Short**, December 8, 2023, Video Link

*What Makes a Prime Number?*, **Short**, December 1, 2023, Video Link

*How Many Moves Does it Take to Solve a Rubik's Cube?*, **Short**, November 24, 2023, Video Link

*6 Weeks is Exactly 10! Seconds?*, **Short**, November 17, 2023, Video Link

*The Unpaintable Paint Can!*, **Short**, November 10, 2023, Video Link

*Math Facts that Sound Fake But Are Actually True! - Part 2*, November 1, 2023, Video Link

*How are those Math Facts that Sound Fake Actually True?!?*, September 13, 2023, Video Link

*Math Facts that Sound Fake But Are Actually True!*, September 2, 2023, Video Link

*An Engineer, a Physicist, and a Mathematician Wake Up in a Burning Hotel...*, August 4, 2023, Video Link

*The Buliding is Empty*, **Short**, August 4, 2023, Video Link

*Classic JRPG World Maps aren't Spheres?!?*, July 28, 2023, Video Link

*Ever Had an Imaginary Moment?*, **Short**, July 28, 2023, Video Link

*Flat Map Morphs Into A Globe Or Does It!*, **Short**, July 15, 2023, Video Link

*You Better Sit Down for this One*, **Short**, July 14, 2023, Video Link

*There Are No Horses of a Different Color!*, July 12, 2023, Video Link

- A Mathematician Smells Fire*, **Short**, July 7, 2023, Video Link
- A Professor's Coke Addiction*, **Short**, June 30, 2023, Video Link
- Is  $\pi$  Really Wrong?*, with Bob Palais, June 28, 2023, Video Link
- Cricket's Laugh at Me*, **Short**, June 23, 2023, Video Link
- So is Your Grade!*, **Short**, June 9, 2023, Video Link
- Stop Saying  $\pi$  is Infinite*, March 14, 2023, Video Link
- Negative Operations*, **Short**, January 27, 2023, Video Link
- 2022** *Having the Same Birthday is Way More Likely Than You Thought*, **Short**, December 29, 2022, Video Link
- Mathematicians React to Hilarious Math Memes #2*, with Zach Hurdle and Wiktor Mogilski, December 23, 2022, Video Link
- Alternate Dimensions!*, **Short**, December 16, 2022, Video Link
- There are Just as Many Even Numbers as Numbers?*, **Short**, December 9, 2022, Video Link
- Triangles - Smash Study Trigonometry #2*, November 26, 2022, Video Link
- Mathematicians React to Math Memes and Comics #1*, November 15, 2022, Video Link
- Why Ranked Choice Voting?*, November 6, 2022, Video Link
- The Angle Sum of a Triangle is NOT 180 Degrees?*, September 19, 2022, Video Link
- Angles - Smash Study Trigonometry #1*, August 11, 2022, Video Link
- Is Math Invented or Discovered?*, July 29, 2022, Video Link
- A Line is NOT the Shortest Distance Between Two Points?*, July 22, 2022, Video Link
- Mathematical Structures*, July 6, 2022, Video Link
- What is Calculus?*, June 22, 2022, Video Link
- General Relativity in Pictures!*, March 29, 2022, Video Link
- 2021** *PEMDAS is a Lie*, November 2, 2021, Video Link
- The Generalized Stokes Theorem*, October 7, 2021, Video Link
- Does Ranked Choice Voting Work?*, March 14, 2021, Video Link
- How to Count to Infinity!*, February 21, 2021, Video Link



**2020** *How can 2 Planets Fit in the Same Telescope View?*, December 23, 2020, Video Link

## **TrigonomeTreats**

**2025** *How to Compute the Cumulative Annual Growth Rate (CAGR) in a Spreadsheet*, August 16, 2025, Video Link

*Population and Compound Interest in Spreadsheets*, August 15, 2025, Video Link

*How to Use VLOOKUP to Search a Table for Data in a Spreadsheet*, August 14, 2025, Video Link

*How to Create If-Then Commands in Spreadsheets*, August 13, 2025, Video Link

*How to Use Random Numbers in a Spreadsheet*, August 12, 2025, Video Link

*Formatting a Cell the Way You Want*, August 11, 2025, Video Link

*Cell Referencing Made Easy!*, August 9, 2025, Video Link

*Fixing Formula Spreadsheet Errors*, August 8, 2025, Video Link

*Eigenvalues, Eigenvectors, and Eigenspaces, Oh My!*, May 22, 2025, Video Link

*The Intermediate Value Theorem for Beginners*, May 19, 2025, Video Link

*Fixing a Continuity Error in a Function*, May 17, 2025, Video Link

*Computing a Limit Using the Limit Laws*, May 9, 2025, Video Link

*The Secret To Memorizing the Unit Circle*, April 19, 2025, Video Link

*Related Rates - Solving an Example*, April 6, 2025, Video Link

*Integration by Parts Made Easy!*, January 30, 2025, Video Link

*How to Find the Equation of a Line that is Parallel or Perpendicular to Another Line*, January 14, 2025, Video Link

*How to Find the Equation of a Line - Part 2*, January 14, 2025, Video Link

*How to Find the Equation of a Line - Part 1*, January 14, 2025, Video Link

*How to Find the Slope and y-intercept of a Line Given by an Equation*, January 14, 2025, Video Link

*Find the Slope Between Two Points*, January 14, 2025, Video Link

*How to Solve a Word Problem on Equations of Curves*, January 13, 2025, Video Link

*Are These Points on this Curve? - Part 2*, January 13, 2025, Video Link

*Are These Points on this Curve? - Part 1*, January 13, 2025, Video Link

**2023** *Why Should You Care About Factoring?*, October 5, 2023, Video Link

*Factoring Some Complicated Trinomials*, October 4, 2023, Video Link

*Three Factoring Examples with the AC No Guess Method*, October 3, 2023, Video Link

*How to Factor Trinomials without Guessing any Factors*, October 2, 2023, Video Link

*What is the Pythagorean Theorem Good For Anyway?*, September 21, 2023, Video Link

*Using Distance to Understand Circles!*, September 20, 2023, Video Link

*Computing the Distance Between Two Points*, September 19, 2023, Video Link

*How Do We Know this is the Distance Formula?*, September 18, 2023, Video Link

## Searing Scovilles

**2023** *Sally Rocks Skis Backwards Off a Cliff While Torching through Spicy Nuggets*, with Sally Rocks and Zach Hurdle, October 11, 2023, Video Link (Originally released on Scholar Sauce on June 16, 2023)

*Sally Rocks Skis Backwards Off a Cliff and Eats Spicy Nuggets*, **Short**, with Sally Rocks, October 11, 2023, Video Link (Originally released on Scholar Sauce on June 16, 2023)

*How Hot is Scholar Sauce? ft. Dr. Sally Rocks*, with Sally Rocks, October 4, 2023, Video Link (Originally released on Scholar Sauce on March 17, 2023)

*How Hot is Scholar Sauce?*, **Short**, with Sally Rocks, October 4, 2023, Video Link (Originally released on Scholar Sauce on March 17, 2023)

*Ellis Jensen Pickles Eggs and Plays a Digeridoo While Blazing through Spicy Nuggets*, with Ellis Jensen, September 27, 2023, Video Link (Originally released on Scholar Sauce on March 10, 2023)

*Ellis Jensen Plays a Digeridoo While Eating Spicy Nuggets*, **Short**, with Ellis Jensen, September 27, 2023, Video Link (Originally released on Scholar Sauce on March 10, 2023)

*Lauren Brooks Talks about Poop while Eating Spicy Cauliflower*, with Lauren Brooks and Zach Hurdle, September 20, 2023, Video Link (Originally released on Scholar Sauce on December 1, 2022)

*Lauren Brooks Talks Poop and Eats Spicy Cauliflower*, **Short**, with Lauren Brooks, September 20, 2023, Video Link (Originally released on Scholar Sauce on December 1, 2022)

*Danny Horns Stays Cool as Ice While Eating Spicy Nuggets*, with Daniel Horns and Zach Hurdle, September 13, 2023, Video Link (Originally released on Scholar Sauce on November 1, 2022)

*Alan Parry Wants You to Love Math While Eating Spicy Nuggets*, with Zach Hurdle, September 6, 2023, Video Link (Originally released on Scholar Sauce on October 6, 2022)

## **UVU Office Hours**

**2022** *Factoring Trinomials Using the AC Method*, December 8, 2022, Video Link

*Addition of Logs Simplified*, November 17, 2022, Video Link

*How to Subtract Logarithms*, October 17, 2022, Video Link

*How to Memorize the Unit Circle for Trigonometry*, September 15, 2022, Video Link

## **BlueMarbleScience**

**2023** *Blue and Scholar Sauce Destroy Try Thinking*, BlueMarbleScience, December 15, 2023, Video Link

## **SERVICE**

### **Professional Service**

Faculty Fellow of the Gary R. Herbert Institute for Public Policy, Utah Valley University, October 2023 - present

USHE/CBMS Early College Pathways Steering Committee, Co-Lead, July 2022 - present

USHE/CBMS Pathways Leadership Committee, Launch Years Initiative, July 2022 - present

Reviewer for the Journal of Mathematical Physics, 2022

USHE Faculty Mathematics Major Committee, February 2020 - May 2024; Chair, February 2020 - May 2024

Reviewer for Classical and Quantum Gravity, 2019

UVU Faculty Senate Policy Liaison, April 2019 - June 2021

UVU Mathematics Department Transfer Articulation, August 2017

UVU Faculty Senate, April 2017 - April 2020

Organizer for the PDE and Differential Geometry Seminar in the University of Connecticut  
Mathematics Department, January 2014 - May 2016

Reviewer for the Canadian Journal of Physics, 2013

### **Committee Service**

UVU Mathematics Department Undergraduate Activities Committee, Co-chair, August  
2025 - present

UVU College of Science Curriculum Committee, August 2025 - present

UVU Mathematics Department Curriculum Committee, Chair, August 2025 - present

UVU Mathematics Department Utah State Math Competition Registration Committee,  
September 2023 - April 2024

UVU Mathematics Department RTP Criteria Revision Committee, September 2022 - May  
2024

UVU Mathematics Department Hiring Committee - Administrative Assistant III, Septem-  
ber 2021

UVU Department Chair Policy Drafting Committee, April 2021 - February 2024; Chair,  
February 2022 - August 2022

UVU Mathematics Department Hiring Committee - Lecturer, April 2021 - June 2021

UVU Mathematics Department Hiring Committee - Tenure-Track Mathematics Faculty,  
September 2020 - June 2021

UVU Course Materials Policy Drafting Committee, August 2020 - February 2024

UVU Department Chair Policy Task Force, August 2020 - May 2021

UVU Search Committee - Associate Vice President of Academic and Student Digital Ser-  
vices, June 2020 - September 2020

UVU Mathematics Department Hiring Committee - Non Tenure Track Lecturer, June 2020  
- August 2020

UVU Policy Coordinator Committee, February 2020 - June 2021

UVU College of Science Faculty Excellence Awards Selection Committee, January 2020 -  
February 2020

UVU Mathematics Department Hiring Committee - Tenure Track Mathematics Faculty,  
January 2020 - April 2020

UVU University Governance Committees Policy Drafting Committee, December 2019 -  
April 2020

UVU Faculty Separation Task Force, December 2019 - June 2021

UVU Search Committee - College of Science Dean, October 2019 - March 2020

UVU Enrollment Management Policy Review Committee, October 2019 - June 2021

UVU Faculty Web Resources Task Force, October 2019 - January 2022

UVU GE Transfer Credit Task Force, August 2019 - September 2019

UVU Academic Scheduling Committee, July 2019 - June 2021

UVU Faculty Senate Executive Committee, April 2019 - June 2021

UVU Faculty Sabbatical Leave Policy Drafting Committee, April 2019 - February 2024,  
Chair, April 2019 - August 2022

UVU Faculty Evaluation of Administrators Policy Drafting Committee, Chair, April 2019  
- June 2021

UVU Policy Subcommittee, April 2019 - June 2021

UVU SCULPT, February 2019 - present

UVU Mathematics Department Hiring Committee - Course Manager, Chair, January 2019  
- May 2019

UVU Mathematics Department Hiring Committee - Tenure Track Actuarial Science Em-  
phasis, January 2019 - May 2019

UVU Data Science Program Committee, January 2019 - September 2020

UVU Faculty Workload Task Force, Chair, December 2018 - April 2019

UVU Mathematics Leadership Committee, August 2018 - June 2024

UVU College of Science Curriculum Committee, August 2018 - September 2019

UVU Mathematics Department Curriculum Committee, Chair, August 2018 - September  
2019

UVU Mathematics Department Graduate Committee, August 2018 - August 2021

UVU Mathematics Department Executive Committee, August 2018 - June 2024; Chair,  
July 2021 - June 2024

UVU Shared Governance Committee, April 2018 - April 2019; Chair, January 2019 - April  
2019

UVU College of Science Faculty Excellence Awards Selection Committee, January 2018 -  
February 2018

UVU Mathematics Department Math 2000 Committee, May 2017 - April 2019; Chair, May 2017 - August 2018

UVU Academic Technology Steering Committee, April 2017 - April 2019

UVU Math Club Committee, April 2017 - August 2018

UVU Mathematics Department Math 1055 Committee, April 2017 - August 2018

UVU Mathematics Department Building a Bridge Between Two Departments Committee, February 2017 - August 2018

UVU Mathematics Department Undergraduate Research Committee, August 2016 - August 2018

UVU Mathematics Department Outreach Committee, August 2016 - August 2018

Duke Mathematics Department Calculus Textbook Selection Committee, February 2013 - March 2013

Duke Mathematics Department Calculus Committee, January 2010 - June 2013

### **Service Presentations/Panels**

**2025** *Faculty Panel - New Faculty Orientation*, Utah Valley University, August 11, 2025, Role: Panel Member

**2024** *Department Chair Workshop Panel*, Utah Valley University, October 15, 2024, Role: Panel Member

*Faculty Panel - New Faculty Orientation*, Utah Valley University, August 12, 2024, Role: Panel Member

**2023** *New Department Chair Academy Panel*, Utah Valley University, May 12, 2023, Role: Panel Member

### **OUTREACH**

2025 Utah State Math Competition, Assisted with facilitating the exam by checking schools in on the day of the exam, March 10, 2025

UVU Math Club Election of  $\pi$  vs.  $\tau$  2020, Represented  $\pi$  in the debate and election, Utah Valley University, October 2020 - November 2020, full debate on October 30, 2020 available on YouTube at <https://www.youtube.com/watch?v=9qu0FYuc4KY&t=480s>.

UVU Math Club Election of  $\pi$  vs.  $\tau$  2016, Represented  $\pi$  in the debate and election, Utah Valley University, September 2016 - November 2016, full debate on October 11, 2016 available on YouTube at <https://www.youtube.com/watch?v=iJSrU39JiA4>.

UVU Mathematics Alumni Association Coordinator, August 2016 - August 2018

University of Connecticut Physics Department Special Awards Judge for Connecticut Science & Engineering Fair, Quinnipiac University, March 15-19, 2016

Event Organizer for 1<sup>st</sup> Annual UConn Multi-Department STEM-fest High School Outreach, University of Connecticut, May 14, 2015

## PROFESSIONAL DEVELOPMENT

**2022-2023** Utah Valley Senior Executive Leadership Forum (UVSELF), Utah Valley University

**2021-2022** UVULEAD, Supervisor Seminar Series, Utah Valley University

## UNDERGRADUATE RESEARCH PROJECTS MENTORED

**2024-2025** Dylan Evans and Sam Lundberg, *RCV Methods, Network Centrality, and Prevalence of Voting Pathologies*, Brigham Young University

**2020-2022** Franklin Maxfield, *Viviani's  $n$  Vertices*, Utah Valley University

**2019-2022** Daniel Havens, *Evolutes that don't Evolve*, Utah Valley University

**2018-2020** Eli Atkin and Ryan Bevan, *Creating a Database of Solutions to the Yang-Mills Equations for the Differential Geometry Package in Maple*, Utah Valley University

## SENIOR THESES SUPERVISED

**2015** Zachary Cohen, *Schwarzschild Spacetime and Friedmann-Lemaître-Robertson-Walker Cosmology*, University of Connecticut, Completed June 2015

## CURRICULUM DEVELOPMENT

### Utah Valley University

#### Courses Created

MATH 3755	Financial Mathematics Laboratory Created with Patrick Ling (2024)
STAT 4715	Mathematical Statistics - Probability and Statistics Laboratory Created with Patrick Ling (2024)
MATH 6330	Advanced Linear Algebra Created with Bob Palais (2020)
MATH 489R	Undergraduate Research in Mathematics Minor addition to course offerings (2019)
MATH 1080	Precalculus QL Created at request by USHE (2018)
MATH 290R	Topics in Mathematics Minor addition to course offerings (2018)
MATH 3250	Introduction to Advanced Calculus Created with David Fearnley, Christine Merrin, and Bob Palais (2018)
MATH 4100	Differential Geometry of Curves and Surfaces Created with Bob Palais (2018)
MATH 2000	Algebraic Reasoning with Modeling QL Chaired development committee (2017)

### Utah Valley University

#### Programs Created

Master of Science	Mathematics Education Created with Bob Palais, Christine Walker, and the Mathematics Department Graduate Committee (2020)
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## TEACHING EXPERIENCE

### Utah Valley University

#### Courses Taught

Advanced Linear Algebra (Graduate)	Spring 2023, Spring 2026
Theory of Linear Algebra	Spring 2019, Spring 2020, Spring 2022, Spring 2024, Spring 2026
Introduction to Modern Algebra I	Fall 2018
Diff. Geom. of Curves and Surfaces	Fall 2019
Discrete Mathematics	Spring 2018
Foundations of Analysis	Spring 2017



Foundations of Geometry	Fall 2017, Spring 2018, Spring 2019, Fall 2019, Spring 2020, Fall 2020, Spring 2021, Fall 2022, Fall 2025, Spring 2026
Geometry for Mid. School Math Teachers	Summer 2023
Diff. Equations and Linear Algebra	Summer 2020, Fall 2020, Summer 2021, Fall 2025
Calculus III	Fall 2018, Spring 2019, Spring 2021, Summer 2024
Math for Elem. Teachers II	Summer 2022, Summer 2024
Calculus II	Spring 2017, Spring 2018, Summer 2020, Summer 2021
Calculus I	Fall 2016, Summer 2017, Fall 2017, Summer 2018, Summer 2019, Summer 2025 (2 sections), Fall 2025
Introduction to Calculus	Fall 2016
Trigonometry	Fall 2016, Summer 2017, Spring 2026
College Algebra	Spring 2017, Summer 2019
Math Leap (MATH 100R or workshop)	Summer 2017, Fall 2017 (5 sections), Spring 2018, Summer 2018 (5 sections), Fall 2018 (3 sections), Summer 2020 (2 sections), Fall 2025

### **Brigham Young University Courses Taught**

Elementary Linear Algebra    Fall 2024 (3 sections), Winter 2025 (3 sections)

### **University of Connecticut Courses Taught**

Elements of Topology	Spring 2016
Mathematical Writing Seminar	Fall 2015, Spring 2016
Transitions to Advanced Mathematics	Fall 2014
Geometry	Spring 2014, Spring 2015, Fall 2015
Applied Linear Algebra	Fall 2013, Spring 2015, Summer 2015
Honors Multivariable Calculus	Fall 2014
Honors Calculus II	Spring 2014
Honors Calculus I	Fall 2013
Calculus I	Summer 2014, Summer 2016
Calculus for Business and Economics	Winter Intersession 2016
Precalculus	Winter Intersession 2014, Winter Intersession 2015

### **Duke University - Graduate Student Instructor Courses Taught**

Laboratory Calculus I	Spring 2011
One Variable Calculus	Fall 2010
Laboratory Calculus and Functions I	Fall 2008, Summer 2009, Fall 2009, Spring 2010, Summer 2010

**Lab TA**

Laboratory Calculus II    Fall 2007

**Utah State University - Graduate Student Instructor  
Courses Taught**

Single Variable Calculus I    Summer 2007

College Algebra                Fall 2006, Spring 2007

Intermediate Algebra         Spring 2006, Summer 2006