TEXAS STATE VITA

I. Academic/Professional Background

A. Name and Title

Name: Dr. Sean Corrigan Title: Senior Lecturer

B. Educational Background

Degree	*Year*	*University*	*Major*	*Thesis/Dissertation*
PHD	2017	Saint Louis University	Mathematics	Morse Numbers and Inequalities and Perfect Morse Functions for Integral Orbifold Borel Homology
MA	2013	Saint Louis University	Mathematics	Best Representations and Intervals of Uncertainty in a Weakened Topology for the Integers
BS	2010	Portland State University	Mathematics	

C. University Experience

Position	*University*	*Dates*
Senior Lecturer, Mathematics	Texas State University	August 2021 - Present
Lecturer, Mathematics	Texas State University. San Marcos, TX, United States	August 21, 2017 - May 2021
Graduate Teaching Assistant, Mathematics and Statistics	Saint Louis University. St. Louis, MO, United States	August 18, 2012 - May 15, 2017
Adjunct Faculty, Mathematics	Saint Louis Community	August 22, 2011 - December 15,

College- Florissant Valley campus. St. Louis, MO, United States	2011

II. TEACHING

A. Teaching Honors and Awards:

Award / Honor Recipient: Teaching Excellence Award, Texas State Mathematics Department.
November 10, 2023 - December 10, 2023

Award / Honor Recipient: Favorite Professor award, Alfred H. Nolle Chapter of the Alpha Chi National Honor Society.
April 12, 2019

Award / Honor Recipient: Favorite Professor award, Alfred H. Nolle Chapter of Alpha Chi National College Honor Society.
November 17, 2017

Award / Honor Recipient: Professor Inspiring Excellence in the Classroom award, Saint Louis University Department of Athletics.
May 4, 2016

Award / Honor Recipient: Ray Freese Graduate Student Teaching Award, Saint Louis University Department of Mathematics and Statistics.
May 5, 2015

B. Courses Taught:

Texas State University:

MATH 1311 - INTERMEDIATE ALGEBRA

MATH 1315 - COLL ALGEBRA

MATH 1315 - COLLEGE ALGEBRA

MATH 1316 - SURV CONTEMP MATH

MATH 1319 - MATH BUS & ECO I

MATH 1329 - MATH BUS & ECO II

MATH 2321 - CALC LIFE SCI I

MATH 2393 - CALCULUS III

MATH 2471 - CALCULUS I

MATH 2472 - CALCULUS II

MATH 2473 - INT CAL W/ MULTIVAR AND SERIES

MATH 3323 - DIFFERENTIAL EQUATIONS

MATH 3325 - NUMBER SYSTEMS

MATH 3373 - CALCULUS III

MATH 3377 - LINEAR ALGEBRA

MATH 5381 - SET THEORY

Saint Louis Community College:

Math 020 - Pre Algebra

Saint Louis University:

Math 1200 - College Algebra

Math 1220 - Finite Mathematics

Math 1400 - Precalculus

Math 1500 - Calculus I

III. SCHOLARLY/CREATIVE

A. Works in Print (including works accepted, forthcoming, in press):

2. Articles:

a. Refereed Journal Articles:

Corrigan, S. J. (2020). Morse inequalities for orbifold Borel homology. *Topology and Its Applications*, *286*. Published. Retrieved from

https://doi.org/10.1016/j.topol.2020.107414
https://doi.org/10.1016/j.topol.2020.107414

B. Works Not in Print:

2. Invited Talks, Lectures, and Presentations:

Corrigan, S. J., Texas State Topology Seminar, "Milnor's Exotic 7-sphere," San Marcos, TX, United States. (April 28, 2023).

Corrigan, S. J., Texas State Topology Seminar, "Rearrangement of Cobordisms, part 2," Texas State University, San Marcos, TX. (October 29, 2021).

Corrigan, S. J., Texas State Topology Seminar, "Rearrangement of Cobordisms, part 1," Texas State University, San Marcos, TX, United States. (October 15, 2021).

Corrigan, S. J., Texas State Topology Seminar, "Homology of orbifold lens spaces," Texas State University, San Marcos, TX, United States. (March 29, 2019).

Corrigan, S., Texas State Topology Seminar, "Morse (in)equalities for low-dimensional orbifolds," Texas State University, SAN MARCOS, TX, United States. (October 18, 2018).

Corrigan, S. J., Texas State Topology Seminar, "Perfect Morse functions on three-dimensional orbifolds," Texas State University, San Marcos, TX, United States. (September 13, 2018).

Corrigan, S. J., Texas State Topology Seminar, "Morse numbers and inequalities for integral orbifold Borel homology," Texas State University, San Marcos, TX, United States. (April 20, 2018).

Corrigan, S. J., Texas State Topology Seminar, "Perfect Morse functions on two-dimensional orbifolds," Texas State University, San Marcos, TX, United States. (February 16, 2018).

Corrigan, S. J., Talk Math 2 Me, "Start Seeing Spheres!," Texas State University Department of Mathematics, Texas State University, San Marcos, TX, United States. (November 3, 2017).

Corrigan, S. J., Graduate Student Topology and Geometry Conference, "Perfect Morse functions on low-dimensional orbifolds," NSF, Michigan State Univeristy, East Lansing, MI, United States. (April 8, 2017).

Corrigan, S. J., "Homology into Submanifolds" Seminar, "The (k-1)-connectivity of the Thom spaces MO(k) and MSO(k)," Saint Louis University, Saint Louis University, St. Louis, MO, United States. (October 25, 2016).

Corrigan, S. J., "Exotic Spheres" Seminar, "Surgery near the middle dimension," Saint Louis University, Saint Louis University, St. Louis, MO, United States. (March 31, 2016).

Corrigan, S. J., "Exotic Spheres" Seminar, "Which homotopy spheres bound parallelizable manifolds?," Saint Louis University, Saint Louis University, St. Louis, MO, United States. (February 18, 2016).

Corrigan, S. J., MAA MathFest, "Best representations and intervals of uncertainty in a weakened topology for the integers," Mathematical Association of America, Connecticut Convention Center, Hartford, CT. (August 3, 2013).

Corrigan, S. J., MAA Missouri Sectional Meeting, "The countably infinite union of alternating groups," Mathematical Association of America, University of Missouri, St. Louis, St. Louis, MO, United States. (April 13, 2012).

5. Other Works not in Print:

c. Other Works Not in Print:

Posters:

Corrigan, S. J., Graduate Student Open House Poster Presentation, "Perfect Morse functions on 2-dimensional orbifolds," Texas State University Department of Mathematics, Texas State University, San Marcos, TX, United States. (November 10, 2017).

IV. SERVICE

A. Institutional

3. Department/School:

Organizer, Math 2473 Teaching Forum. (August 2025 - Present).

Participant, College Algebra Teaching Forum. (September 2018 - Present).

Organizer, Calculus II Integration Bootcamp. (September 2024 - October 2024).

Moderator, MAA Texas Sectional Meeting. (March 23, 2024).

Participant, Calculus I Teaching Forum. (August 2023 - December 2023).

Organizer, Calculus 3 Teaching Forum. (March 2020 - December 2023).

Participant, Math Graduate Programs Expo. (November 5, 2021).

Co-Chair, Calculus Confabulation. (March 2018 - December 2019).

Member, Texas State Problem Solvers. (August 30, 2017 - December 2019).

Participant, Business Math Teaching Forum. (September 2017 - December 2018).