Sara "Holly" Tidwell

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EDUCATION

Ph.D. in Mathematics Education, Texas State GPA 3.9 — 2024-present
Texas State University, San Marcos, TX

M.S. in Mathematics, GPA 4.0 — 2022-present
Texas State University, San Marcos, TX

B.S. in Mathematics, Texas State GPA 3.88 — 2022
Texas State University, San Marcos, TX

Associate of Arts in General Studies — 2019
Austin Community College, Austin, TX

AWARDS

Graduate Teaching Award, Texas State University — 2023
Graduate Scholarship, Texas State University — 2023
Graduated Summa Cum Laude — 2022
Undergraduate Recognition for Academic Excellence, Texas State University — 2022
Dean's List, Texas State University — 2021-2023

PROFESSIONAL EXPERIENCE

Teacher of Record, Texas State University, San Marcos, TX — 2024-2026

- This involved creating a Canvas page, a syllabus, lesson plans, writing and grading exams, homework, and other assignments for each course.
- Instructed regular classes, office hours, and provided students with resources to succeed in their courses
- Instructed the following courses:
    - MATH 1300
    - MATH 1316
    - MATH 1312
    - MATH 2312

Counselor at Mathworks, Texas State University, San Marcos, TX — 2023-2025

- Taught early high school students number theory, topology, abstract algebra, and proof writing techniques
- Worked with educational researchers and learned techniques to facilitate a comfortable and fun work environment for group problem solving
- Was responsible for the safety and wellbeing of students at all times

Calculus I & II Lab Instructor, Texas State University, San Marcos, TX — 2023

- Taught two Calculus I labs supervised by Professor Cody Patterson
- Taught two Calculus II labs supervised by Professors Timothy Chase and Jaracz
- Taught two precalculus labs supervised by Professor Hongseok Chang
- Created and delivered short lectures covering Calculus topics

- Created lesson plans and worksheets emphasizing group work and a natural flow of topics
- Graded all lab work and determined final grades for lab.

Paper Grader, Texas State University, San Marcos, TX 2021-2022

- Graded Homework and entered grades for Intro to Statistics taught by professor Shuying Sun.

Physics Lab Instructor, Texas State University, San Marcos, TX 2020

- Taught one lab for Physics 1430 "Mechanics" supervised by Professor Ricardo Mastroleo.
- Instructed students on how to form proper experiments and use the scientific method
- Aided students in editing code to perform simulations of experiments.
- Met with students during office hours to explain relevant topics in physics.
- Graded all written work and determined final grades for the lab.

RESEARCH EXPERIENCE

Graduate Research Assistant, Texas State University, San Marcos, TX 2023-2026

- Worked on the GLIST project ran by Dr. HY Lee.
- Attended weekly meetings where we created materials and organized our plans for research.
- Collaborated with teammates in creating organizational tools and tasks to collect data on.
- Collected written and video data at TXST university courses and a local middle school.
- Analyzed and coded data relevant to the research project.

"On Sums of Semibounded Cantor Sets", Texas State University, San Marcos, TX 2021-2023
Supervised by Dr. Jake Fillman, published by Rocky Mountain Journal.

- https://projecteuclid.org/journals/rmjm/rocky-mountain-journal-of-mathematics/DownloadAcceptedPapers/220613-Fillman.pdf
- Discusses the conditions under which multidimensional continuum quasicrystal models contain a half-line.
- Met weekly with Dr. Fillman to collaborate in solving problems.
- Solved mathematical problems using analysis proof techniques.
- Practiced writing and explaining mathematics at a level acceptable for publication.

"Bounding the Derived Length and Fitting Length of a Solvable Group", 2023-present
Supervised by Yong Yang.

COMPUTER/TECHNICAL SKILLS

- C++
- LaTeX
- RStudio
- Mathematica
- JavaScript
- HTML

ACTIVITIES

Math Club, Texas State University, San Marcos, TX 2021-2022