Elizabeth Holmen-Crow

(619)-849-2634 ecrow@pointloma.edu

Education

2025 University of California, Santa Barbara

PhD Candidate, Department of Mathematics

Dissertation: The Teichmüller Space of Homogeneous Affine Tori

2021 University of California, Santa Barbara

Master of Arts in Mathematics

UCSB Regents Fellowship Award, 2018-2019

2018 Calvin College

Bachelor of Science in Mathematics with Honors

Bachelor of Arts in French

Rinck Memorial Award, Math Department, 2018

French Department Outstanding Senior, 2018

Dean's List, 2014-2018

Academic Advising Committee 2016-2018

Teaching Experience

Jan 2025-Present Assistant Professor of Mathematics

Point Loma Nazarene University Math 1033: Pre-Calculus (SP25)

Math 1053: Math Analysis for Business and Econ (SP25)

Math 3003: Problem Solving (SP25) Math 1064: Calculus 1 (FA25)

Summer 2021, 2022 Instructor of Record

UCSB Math Department

Math 3A: Calculus with Applications I

 Daily instruction for 6 weeks, office hours, course design and management

• Coordinated with a TA for their twice-weekly discussion sections

Fall 2018-Dec 2024

Teaching Assistant

UCSB Math Department

- Assigned various courses to teach weekly or twice-weekly discussion sections, hold office hours, work in the math lab, design supplementary materials, grade homework and/or exams
- Zoom teaching indicated with *, Head TA indicated in bold

Math 2A/B: Calculus with Algebra and Trig I/II (FA19/W20) Math 3A/B: Calculus with Applications I/II (FA18/SP21*)

Math 4A: Linear Algebra with Applications (SU20*, FA20*)

Math 6B: Vector Calculus II (W21*)

Math 8: Transition to Higher Mathematics (FA23)

Math 34A/B: Calc for Social and Life Sciences I/II (FA21, W23/W22, W24)

Math 108A/B: Linear Algebra II (FA24, FA25/SU23)

Math 111A: Abstract Algebra I (FA22)

Math 145: Introduction to Topology (SP20*) Math 182: History of Mathematics (SP22)

Service

January 2026	JMM Project NExT Session Co-organizer
	 Centering Fun and Joy in the Classroom: Insights and
	Perspectives Inviting Students into the Joy of Mathematics
2022-2023	Association for Women in Mathematics Publicity Chair
	 Designed and distributed promotional materials for the chapter
2019-2023	Hypatian Seminar Co-Organizer
	 Provided a space for underrepresented voices in math to be
	heard and honored, organized seminars and speakers to
	improve the graduate student experience for all
2020	Directed Reading Program Mentor
	 Mentored an undergraduate student on topological graph theory
	 Advised on the creation of an end-of-year poster
2019, 2020, 2023	Graduate Recruitment
	 Aided in math department efforts to promote programs and
	research groups at UCSB by taking students to lunch
Winter 2023	Finding an advisor Panel, UCSB
Fall 2022	Experienced TA and Graduate Student Panel, UCSB
Summer 2021	Preparing Undergraduates for Graduate School Graduate Panel, UCSB
Spring 2021	Graduate School in Math Panel, Marian University

Professional Development

2025-2026	MAA Project NExT Fellow, Orange '25
2022-2023	Community of Practice for Graduate Students: Course Design for Equity
	 Discussed various teaching modalities, grading styles, accessibility, and structural barriers in academia
	 Workshopped course components and assignments
2021	Summer Teaching Institute for Associates
	 Course planning, workshops on pedagogy, technology training, mentorship while teaching
2018-Present	Certificate in College and University Teaching
	 TA training, use of evidence-based pedagogy in the classroom, feedback on teaching skills, reflection on teaching philosophy

Talks and Conferences

Spring 2024	Calvin University Math Colloquium Speaker
	 From the Euler Characteristic to Affine Geometry
Fall 2023	Wasatch Topology Conference, University of Utah
	 Annual conference in Geometric Group Theory (GGT)
	 Presented Projective Structures on the Circle
Summer 2023	Group Actions and Low-Dimensional Topology Conference, Spain
	 Part of a thematic program in GGT and Low-Dim Topology
Spring 2023	Underrepresented Students in Topology and Algebra Research Symposium

Fall 2023	UCSB Graduate Topology Seminar Speaker
	 Projective Structures on the Circle
Winter 2023	UCSB Topology Seminar Speaker
	• The Deformation Space of Affine Tori (Advancement to Candidacy talk)
Spring 2022	Calvin University Math Colloquium Speaker
	 The highs and lows of graduate school and finding Christ in the cracks
Fall 2020	UCSB Graduate Topology Seminar Speaker
	The Alexander Horned Sphere

Memberships

Mathematical Association of America Association for Women in Mathematics American Mathematical Society