

Amy F. Szczepański

Math Department · 121 Ayres Hall · 1403 Circle Drive · Knoxville, TN 37996-1300
szczepanski@math.utk.edu · office: 865.974.8419 · fax: 865.974.6576

Education

University of California, San Diego

Ph.D. Mathematics (2001).

Dissertation: *From Jacobson Rings to the Jacobson Conjecture*,
under the direction of Lance W. Small.

National Physical Science Consortium Fellow.

M.A. Mathematics (1997).

Dartmouth College, Hanover, NH

A.B. Mathematics (1995). Minor: Physics. Magna cum laude.

Academic Employment

University of Tennessee, Knoxville

Mathematics Department

Lecturer (2003– present) and Service Course Coordinator (2005– present).

- Manage curricular and administrative issues relating to service courses. Field questions, complaints, and appeals from students enrolled in those courses. Assist in training of GTAs.
- Mathematics courses taught include: mathematical reasoning, math for elementary education, college algebra, and calculus.
- Course coordinator for mathematical reasoning (2003– present) and for mathematics for elementary education (2004–05).
- Taught regular-sized sections of the calculus I–II sequence for students in math, sciences, and engineering. Taught the 250-student lecture of the applied “business” calculus course, including supervising GTAs for 10 recitation sections.
- Designed and taught seminar on cryptology for the Chancellor’s Honors Program (Spring 2006) and one-credit-hour freshman seminars on Electronic Communication and Privacy (Fall 2007) and the Mathematics of Decision Making (Fall 2008).
- Arts and Sciences Advisor (2007–08).

Academic Employment (Continued)

Monmouth University, West Long Branch, NJ

Assistant Professor (2002–03).

Taught calculus, logic for software engineering, quantitative reasoning.

Hobart and William Smith Colleges, Geneva, NY

Assistant Professor (2001–02).

Taught precalculus and multivariable calculus.

Cornell University, Ithaca, NY

Visiting Assistant Professor (summer 2001).

Taught applied abstract algebra.

University of California, San Diego

Teaching Assistant (1996–2000).

Assorted assignments from the undergraduate mathematics curriculum.

Other Employment

Center for Excellence in Education

Research Science Institute at the Massachusetts Institute of Technology

Assistant Director (summers 2007 and 2008).

Tutor (previously called a Teaching Fellow) (summer 1997).

Center for Communications Research, La Jolla, CA

SCAMP summer visiting mathematics researcher (summer 1996).

National Security Agency, Ft. Meade, MD

National Physical Science Consortium student researcher (summer 1995).

Director's Summer Program student researcher (summer 1994).

Computer Skills

Operating Systems: Mac OS X and Unix

Markup: \LaTeX , HTML, and CSS

Programming: Perl, C, Objective C

Publications

A.F. Szczepański and A.P. Kositsky. *The Complete Idiot's Guide to Pre-Algebra*, published by Alpha Books (2008). ISBN-13: 978-1-59257-772-9.

A.F. Szczepański. Quilted Möbius Band. In: *Making Mathematics with Needlework: Ten Papers and Ten Projects*, s-m. belcastro & C.A. Yackel, (Eds.) published by AK Peters (2007). ISBN-13: 978-1-56881-331-8.

s-m. belcastro, A.F. Szczepański, and C.A. Yackel. (K)not Cables, Braids. In: *Making Mathematics with Needlework: Ten Papers and Ten Projects*, s-m. belcastro & C.A. Yackel, (Eds.) published by AK Peters (2007). ISBN-13: 978-1-56881-331-8.

A.F. Szczepański. Generic flatness and the Jacobson conjecture. *Comm. Algebra* **33** (2005), no. 11, 4159–4169.

Presentations

Designing Patterns for Kintting Geometric Shapes. Gathering for Gardner G4G8, Atlanta, GA. March 27, 2008.

Math and Knitting: a real-world application. Hudson-Mohawk Mathematics Conference, Niskayuna, NY. March 25, 2006.

Decoding the Bar Code. Hudson-Mohawk Mathematics Conference, Latham, NY. April 2, 2005.

Quilts in the Classroom. AMS Special Session on Mathematics and Mathematics Education in Fiber Arts. Joint Mathematics Meetings, Atlanta, GA. Friday, January 7, 2005.

Fractals – The Julia Set. Hudson-Mohawk Mathematics Conference, Delmar, NY. March 13, 2004.

Computer Typesetting and the Letter S. UTK Mathematics Junior Colloquium. March 4, 2004.

Fractals – The Julia Set. Knox County Schools Teacher Workshop, Knoxville, TN. February 13, 2004.

Mathematics of Repeating Geometric Patterns. Hudson-Mohawk Mathematics Conference, Burnt Hills, NY. March 22, 2003.

Quilting the Dihedral Group. MAA Session on Mathematical Connections in Art, Music, and Science. Joint Mathematics Meetings, Baltimore, MD. January 18, 2003.

Group Theory and the Design of Patchwork Quilts. Mathematics Colloquium, Rowan University, Glassboro, NJ. November 18, 2002.

Nullstellensatz Variations. Olivetti Club Seminar, Cornell University, Ithaca, NY. April 3, 2001.

Professional Development

Innovative Technology Center Faculty First Grant

Worked with staff of UTK's Innovative Technology Center to design and implement a system for using technology to automate the process of taking attendance in class (Spring 2008).

ACCLAIM Mathematics Teacher Preparation in Appalachia

Third Annual Conference of the Appalachian Collaborative Center for Learning, Assessment, and Instruction in Mathematics in Huntington, WV (September 17–18, 2004).

Integration of the NCTM Mathematics Process Standards in the teaching and learning of mathematics in the Appalachian region.

MAA PREP Workshop

Presenting Mathematical Masterpieces and Powerful Techniques of Effective Thinking to Non-Science Students (July 2003).

This three-day workshop outlined meaningful and engaging mathematical material and how to present it to students at all levels.

MAA Project NExT (New Experiences in Teaching)

Fellow (2002-03 "forest dot" cohort).

Participated in programs designed for new and recent Ph.D.s in the mathematical sciences who are interested in improving the teaching and learning of undergraduate mathematics.

MAA Minicourse

Getting Students Involved in Undergraduate Research (January 2003).

Topics included how to find open problems that undergraduates can tackle, selecting forums where students can share their results, and other practical advice on guiding student research.