

Amanda L. Ruiz
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- RESEARCH INTERESTS** Matroid theory, combinatorics, complex matroids, mathematics education.
- EDUCATION**
- Binghamton University, Binghamton, NY**
Ph.D student (ABD), Mathematics, August 2009-present.
 - Advisor: Laura Anderson
 - Thesis Topic: "Realizations of complex matroids."
- San Francisco State University, San Francisco, CA**
M.A., Mathematics, May 2009.
 - Advisor: Federico Ardila
 - Thesis Topic: "An isomorphism theorem for cotransversal matroids."
- Bay Area Teachers Center, San Francisco, CA**
Coursework for Single Subject Teaching Credential, Mathematics. September 2004-2005
 - California Preliminary Single Subject Teaching Credential issued October 2008
- University of California at Berkeley, Berkeley, CA**
B.A., Interdisciplinary Studies Field, December 2000
 - Thesis Topic: "The growth of the prison industrial complex in California."
- HONORS AND AWARDS**
- Clifford D. Clark Graduate Fellowship Program for Diversity, 2009-2014
Achievement Rewards for College Scientists Foundation (ARCS) Scholarship, 2008-2009
SFSU Robert W. Maxwell Memorial Scholarship 2007-2008
SFSU College of Science and Engineering Student Project Showcase. Poster, 5th place- graduate physical sciences division, May 2008
SFSU Lawrence Chang Memorial Scholarship Award 2007-2008
SFSU Mathematics Bridge Scholarship Award 2006-2007
- Presentations:**
- INTERNATIONAL** Poster presentation. XX International Conference on Formal Power Series and Algebraic Combinatorics (FPSAC), June 2008, Valparaiso, Chile.
- NATIONAL**
- American Mathematical Society Fall Southeastern Section Meeting, Winston-Salem, North Carolina. Special Session Algebraic and Geometric Aspects of Matroids. September, 2011.
- Poster presentation. Mathematical Association of America (MAA) NorCal, NV, HI Section Meeting, March 2008. Sacramento, CA.
- Algebra, Number Theory, Combinatorics and Applications (ALTENCOA3), July 2008, Bucaramanga, Colombia.
- Graduate Student Combinatorics Conference (GSCC), April 2008. University of California at Davis.
- Poster presentation. Mathematical Association of America (MAA) NorCal, NV, HI Section Meeting, March 2008. Sacramento, CA.

LOCAL Algebra, geometry, combinatorics seminar, September, 2011. San Francisco State University.
Combinatorics Seminar, May 2011. Binghamton University.
Combinatorics Seminar, September 2009. Binghamton University.
Graduate Research and Creative Works Showcase. Poster presentation, May 2008, San Francisco State University.
College of Science and Engineering Student Project Showcase. Poster presentation, May 2008, San Francisco State University.
Algebra, geometry and combinatorics seminar, November 2007. San Francisco State University.

PUBLICATIONS *When do two planted graphs have the same cotransversal matroid?*, with F. Ardila, to appear in Boletín de la Sociedad Mexicana de Matemáticas.

ACADEMIC EXPERIENCE **Binghamton University**, Binghamton, NY
Graduate Student August 2009 - Current
Working towards PhD.
Funded by Clifford D. Clark Graduate Fellowship Program for Diversity
Instructor Calculus I Summer session July 2011
Provided a comprehensive course outline, appropriate notice of assignments, and adhered to the specifics of the course outline for math courses.
Maintained office hours and appointments upon request for personal consultation with students.
Co-instructor Calculus I January 2011 - May 2011
Participated in a funded program to co-teach Calculus with another graduate student
Meet regularly with co-instructor to discuss the course and provide and receive teaching feedback.
San Francisco State University, San Francisco, CA
Graduate Student January 2007 - May 2009
Masters level coursework and research projects.
Research Assistant June 2007 - May 2008
Research in combinatorics; focus on matroid theory, under the supervision of Dr. Federico Ardila.
Instructor January 2007 - May 2007
Provided a comprehensive course outline, appropriate notice of assignments, and adhered to the specifics of the course outline for math courses.
Maintained office hours and appointments upon request for personal consultation with students.

- Math 59, Algebra I with pre-algebra, Spring 2007.

Teaching Assistant August 2007 - present
Duties include office hours, grading, and leading weekly calculus lab sessions.

- Math 228, Calculus III, Fall 2007
- Math 227, Calculus II, Spring 2008
- Math 226, Calculus I, Fall 2008

PROFESSIONAL
EXPERIENCE

Woodside High School , San Francisco

Instructor

Summer 2009, 2010

- Prepare and manage independent studies mathematics curriculum for about 20 students

Mathematical Sciences Research Institute, Math Circles , San Francisco State University

Instructor

Spring 2008, Spring 2009

- Develop lesson plans and instruct visiting high school students once a week on topics in mathematics

San Francisco University High School , San Francisco, CA

Lead Teacher

Summer 2007

- Develop lesson plans and instruct rising 9th graders in advanced mathematics topics in Algebra and Geometry.
- Mentor an assistant teacher who was a high school student interested in teaching as a profession.

Oakland Emiliano Zapata Street Academy, Oakland, CA

Counselor Teacher Mentor

September 2004 - June 2005

- Tutor and counsel students
- Teach Geometry and Algebra II
- Teach electives such as "Math Games" and "Metamorphosis"
- Coordinate peer tutoring program

Paso Del Norte Academy, El Paso, TX

Teacher Tutor Coach

September 2003 - May 2004

- Create curriculum for and teach Algebra I and "Career Preparation" courses
- Prepare graduating students to pass the TAAS exit level math exam
- Coach Boys Basketball

East Bay Consortium of Educational Institutions / Cal-SOAP, Oakland, CA

Prospective Teacher

July 2004

- Co-teach middle school mathematics summer enrichment program

Program Coordinator

January 2001 - July 2003

- Organize and coordinate college preparatory programs for students and parents
- Help coordinate middle and high school tutoring and mentoring programs

Tutor Mentor

September 2000 - July 2003

- Provide tutoring, academic, and social support to secondary school students

ADDITIONAL ACTIVITIES

Binghamton University Parents Collective. President. Summer 2011-present.

Mathematistas: Women in pursuit of higher mathematics. Founder, president. Fall 2007-Spring 2009.

Mathletics, intramural indoor soccer team. Organizer, captain. Spring 2007-Spring 2008.

Registrar of Voters, Alameda County. Inspector for November 2004 election.

REFERENCES

Available upon request.