

CURRICULUM VITA

JULIE LANG

(859) 638-6024

jelang@email.sc.edu

people.math.sc.edu/jelang/

EDUCATION

Enrolled in Math Ph.D. program at University of South Carolina (Aug 2015-present)

Enrolled in Math Ph.D. program at Universidad de Puerto Rico Río Piedras Aug-Dec 2014

M.S. Mathematics, Kansas State University, 2012-2014

Thesis: Graphs Admitting $(1, \leq 2)$ -identifying Codes, adviser: Dr. Sarah Reznikoff

B.S. Morehead State University, 2008-2012

Area of Concentration: Mathematics; Majors: Physics, Spanish

Capstone: Global Properties of Preferential Attachment Graphs, adviser: Dr. R. Duane Skaggs

TEACHING EXPERIENCE

Instructor

- Calculus for Business Administration and Social Sciences, University of South Carolina, Spring 2017
- Intensive College Algebra, University of South Carolina, Fall 2016
- Calculus I, University of South Carolina, Summer 2016
- General Calculus and Linear Algebra (Business Calculus), Kansas State University, Summer 2014, Team-taught with Spencer Hobson-Gutierrez

Recitation instructor

- Calculus I, University of South Carolina, Spring 2016
- Calculus II, University of South Carolina, Fall 2015
- General Calculus I, Kansas State University, Spring 2014
- Studio College Algebra (has Excel lab component), Kansas State University, Fall 2013
- Plane Trigonometry, Kansas State University, Spring 2013
- College Algebra, Kansas State University, Fall 2012

4+ years of official tutoring experience

- University of South Carolina, Aug 2015 – present
- Sylvan Learning Center, Jan – Jul 2015
- Educational Student Services, Jan – May 2015
- Universidad de Puerto Rico, Aug – Dec 2014
- Kansas State University, Aug 2012 – Jul 2014

RESEARCH INTERESTS

Mathematics Education (particularly undergraduate)

Graph Theory (specifically dominating sets and identifying codes)

Discrete Mathematics

PRESENTATIONS

Graphs with Equal Domination Number and Identification Number; the Spring Number of a Graph, co-author: Lindzey Thacker, Mentor: R. Duane Skaggs

- Graduate Colloquium, University of South Carolina, Mar 2017, Presentation
- Kansas section of Mathematics Association of America, Mar 2014, Presentation
- Graduate Student Seminar, Kansas State University, Mar 2014, Presentation
- MathFest, Aug 2012, Presentation
- Instituto Tecnológico de Costa Rica, Jul 2012, Presentation (Spanish version)

Paving Success and College Readiness in Mathematics, Mentor: Dora Ahmadi

- MathFest, Aug 2012, Presentation
- Celebration of Student Scholarship, Apr 2012, Presentation
- Kentucky section of Mathematics Association of America, Mar 2012, Presentation

Heat Transfer Model on Various Grids with Discrete Exterior Calculus, Mentor: Peter Saveliev

- Kentucky Academy of Science, Nov 2011, Poster
- Bluegrass Undergraduate Mathematics Symposium, Sept 2011, Presentation
- Research Experience for Undergraduates at Marshall University, Aug 2011, Poster

A Mathematics College Readiness Project, Mentor: Dora Ahmadi

- Celebration of Student Scholarship, Apr 2011, Presentation
- Kentucky section of Mathematics Association of America, Mar 2011, Presentation

Monte Carlo Simulations of Metastable Decay in the Ising Model on the Hyperbolic Plane, co-authors: Mallory Price and James Howard, Mentor: Howard Richards

- American Physical Society national meeting, Mar 2011, Presentation, presenter: Howard Richards
- Research Experience for Undergraduates at Marshall University, Aug 2010, Poster, presenter: Mallory Price

Metastable Decay of the Ising Model on Archimedean Solids, co-authors: James Howard and Mallory Price, Mentor: Howard Richards

- Faculty seminar, Sept 2010, Morehead State University, Presentation
- Research Experience for Undergraduates at Marshall University, Aug 2010, Poster

Is Lecture Making a Difference in Learning College Algebra? College Algebra Redesign Project at MSU, Mentor: Dora Ahmadi

- Celebration of Student Scholarship, Apr, 2010, Presentation
- Kentucky Section of Mathematics Association of America, Mar 2010, Presentation
- Kentucky Academy of Science, Nov 2009, Presentation

Pain in the Neck: a Statistical Analysis of Neck Endurance Data, Mentor: Dora Ahmadi

- Celebration of Student Scholarship, Apr 2009, Presentation

AWARDS AND DISTINCTIONS

Outstanding First-Year Graduate Student nominee: Teaching, 2016

Totally Tutoring Award nominee, 2015

Outstanding Undergraduate Student in the department of Mathematics, Computer Science, and Physics, 2012

Graduated Magna Cum Laude, Morehead State University, 2012

Co-president of Physics club, 2011-2012

Co-vice president of Mathematics, Computer Science, and Physics club, 2010-2011

Kentucky Academy of Science Undergraduate math poster competition, first place, 2011

Mathematics and Computer Science Departmental Scholarship, 2009

WORK EXPERIENCE

Graduate Teaching Assistant, University of South Carolina, Aug 2015 – present

Freelance Tutor, Columbia SC, Aug 2016 – present

Tutor at Sylvan Learning Center, Manhattan KS, Jan – Jul 2015

Freelance Tutor, Manhattan KS, Jan – Jul 2015

Educational Support Services Advanced Mathematics Tutor, Jan – May 2015

Graduate Teaching Assistant, Universidad de Puerto Rico Río Piedras, Aug – Dec 2014

Graduate Teaching Assistant, Kansas State University, Aug 2012 – Aug 2014

Undergraduate Research Fellow, Morehead State University, Aug 2008 – May 2012

OFFICIAL RESEARCH EXPERIENCE

Master's thesis, Kansas State University, Manhattan, KS, 2014

Research Experience for Undergraduates; Math, Marshall University, Huntington, WV, 2011

Research Experience for Undergraduates; Physics, Marshall University, Huntington, WV, 2010

Undergraduate Research Fellowship, Morehead State University, Morehead, KY, 2008-2012

SERVICE / VOLUNTEER

University of South Carolina High School Math Contest Volunteer, Feb 2016-2017

Open House Volunteer, Kansas State University, Apr 2013-2014

Manhattan KS Gathering 4 Gardner Volunteer, Manhattan Public Library, Oct 2012

Open House Volunteer, Morehead State University, Jan 2009-2012

Mathematics, Physics, and Technology Exploration Day Volunteer, Morehead State University,
Oct 2008-2011

SCHOLARLY MEMBERSHIPS

Pi Mu Epsilon, 2015-present

American Mathematical Society, 2012-2014

Society of Physics Students, 2011-2012

American Physical Society, 2010-2012

Society for Industrial and Applied Mathematics, 2010-2012

CONFERENCES ATTENDED (presented marked with *)

Triangle Lectures in Combinatorics, North Carolina State University, Feb 2016

*Kansas section of Mathematics Association of America, Mar 2014

*MathFest, Madison WI, August 2012

Joint Mathematics Meeting, Hynes Convention Center, Boston MA, Jan 2012

*Kentucky Academy of Science, Murray State University, Nov 2011

*Bluegrass Undergraduate Mathematics Symposium, Centre College, Sept 2011

*Celebration of Student Scholarship, Morehead State University, Apr 2011

Society of Physics Students meeting, Morehead State University, Apr 2011

*Kentucky section meeting of Mathematics Association of America, Eastern Kentucky University, Mar 2011

*Celebration of Student Scholarship, Morehead State University, Apr 2010

Society of Physics Students meeting, Indiana University, Apr 2010

*Kentucky section meeting of Mathematics Association of America, University of Kentucky, Mar 2010

*Kentucky Academy of Science, Northern Kentucky University, Nov 2009

*Celebration of Student Scholarship, Morehead State University, Apr 2009

Kentucky section meeting of Mathematics Association of America, Kentucky State University, Mar 2009