

KAYLA K. BLYMAN, PH.D.

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Saint Martin's University
Department of Mathematics

E-mail: profkaylablyman@gmail.com
Website: www.kaylablyman.com

ACADEMIC POSITIONS HELD

- 2020 - **Saint Martin's University**, Lacey, Washington.
Assistant Professor of Mathematics.
- 2017 - 2020 **United States Military Academy**, West Point, New York.
Assistant Professor of Mathematics.
- 2015 - 2016 **Berea College**, Berea, Kentucky.
Adjunct Lecturer of Mathematics.
- 2015 **Midway College**, Midway, Kentucky.
Adjunct Instructor of Mathematics.
- 2014 - 2015 **University of Kentucky**, Lexington, Kentucky.
STEM Education Graduate Assistant.
- 2014 *Mathematics Research Assistant.*
- 2009 - 2014 *Mathematics Teaching Assistant.*

EDUCATION

- 2009 - 2017 **University of Kentucky**, Lexington, Kentucky.
Ph.D. in STEM Education - Mathematics Education, May 2017.
Advisor: Margaret J. Mohr-Schroeder, Ph.D.
M.A. in Mathematics, December 2011.
Advisor: Carl Lee, Ph.D.
- 2005 - 2009 **Messiah College**, Grantham, Pennsylvania.
B.A. in Mathematics, May 2009.
Departmental Honors.
Magna Cum Laude.
- 2008 **University of Oxford**, Oxford, United Kingdom.
Visiting Student.
- 2007 **Middle East Studies Program**, Cairo, Egypt.

HONORS AND AWARDS

- 2020 **Dean's Award for Service and Cadet Development Excellence**
United States Military Academy, West Point, NY.
Brigadier General (retired) Jack M. Pollin Award for Faculty Excellence
United States Military Academy, West Point, NY.
Department of the Army Civilian Service Commendation Medal
United States Military Academy, West Point, NY.
Department of the Army Certificate of Appreciation
United States Military Academy, West Point, NY.
- 2009 **Daniel R. Reedy Quality Achievement Fellowship**
University of Kentucky, Lexington, KY.

TEACHING EXPERIENCE

SAINT MARTIN'S UNIVERSITY

Combinatorics. (*Fall 2022*)
Independent Study - One Student

Differential Equations. (*Summer 2021 & 2022, Spring 2023*)
Summer 2022 Independent Study - Three Students

Introduction to Actuarial Science. (*Spring 2022*)
Independent Study - One Student

Introduction to Advanced Mathematics. (*Fall 2020, 2021, & 2022*)

Introduction to Statistics. (*Fall 2021 - Spring 2022*)

Mathematical Modeling. (*Spring 2021 & 2022*)

Mathematics for Computer Science. (*Spring 2022 & 2023*)

Mathematics in Modern Society. (*Fall 2020 - Fall 2021, Fall 2022*)

Probability and Statistics. (*Fall 2020 - Summer 2021 & Summer 2022 - Spring 2023*)
*Summers 2021 & 2022 with **North China Institute of Aerospace Engineering***
Summer 2022 Independent Study - One Student

UNITED STATES MILITARY ACADEMY - WEST POINT

Multivariable Calculus & Introduction to Differential Equations. (*Fall 2019*)

Mathematical Modeling and Introduction to Calculus. (*Fall 2017 - Fall 2019*)
This is freshman-level introduction to discrete and continuous mathematical modeling.

Discrete Mathematics. (*Spring 2019 & 2020*)

Linear Algebra. (*Fall 2018*)

Advanced Engineering Mathematics. (*Spring 2018*)
This is an introduction to linear algebra and partial differential equations.

BEREA COLLEGE

College Algebra. (*Fall 2015 & 2016*)

Elementary Algebra I. (*Fall 2016*)

Introduction to Statistics. (*Fall 2016*)

Trigonometry. (*Fall 2015*)

MIDWAY COLLEGE

Calculus II. (*Summer 2015, Online*)

Intermediate Algebra. (*Spring 2015, Panamanian ELL Students*)

UNIVERSITY OF KENTUCKY

Elementary Calculus and Its Applications. (*Summer 2014*)

Math for Elementary School Teachers. (*Fall 2011 & 2013*)

Geometry for Middle School Teachers. (*Fall 2012*)

College Algebra. (*Summer 2010, CARES FSP; Fall 2010, CARES; & Summer 2012, Online*)
(CARES) The Center for Academic Resources and Enrichment Services is a division of the Office for Institutional Diversity that strives to aid in increasing the retention and graduation rates of underrepresented students at the University of Kentucky.
CARES (FSP) Freshman Summer Program is a six week residential enrichment program offered through CARES that is designed to orient underrepresented first year students to academic and student life at the University of Kentucky.

Problem Solving for Elementary School Teachers. (*Spring 2012*)

Introduction to Contemporary Mathematics. (*Spring 2011 & Summer 2011, CARES FSP*)

AUXILIARY TEACHING EXPERIENCE

UNIVERSITY OF KENTUCKY – MATHEMATICS

Curriculum Design & Primary Instructor	FastTrack to Calculus. (<i>Summer 2012</i>) FastTrack is a residential academic program designed to prepare first-year students for rigorous undergraduate course work before the start of the fall semester at the University of Kentucky. Mathematics for the Area Health Education Center's Health Careers Summer Program for High School Juniors. (<i>Summers 2011, 2012, & 2013</i>)
Recitation Leader	Finite Mathematics and Its Applications. (<i>Spring 2013</i>) College Algebra. (<i>Fall 2010, CARES</i>) Calculus II. (<i>Spring 2010</i>) Calculus I. (<i>Fall 2009</i>)
Tutor	Mathematics Exam Review Sessions. (<i>Spring 2010 - Fall 2012</i>) Undergraduate Mathematics Help Room. (<i>Fall 2009 - Spring 2013</i>)

UNIVERSITY OF KENTUCKY – MATHEMATICS EDUCATION GRADUATE COURSES

Graduate Assistant	Mathematics Student Teaching in the Secondary School. (<i>Spring 2015</i>) Foundations of Pedagogical Theory in STEM Education. (<i>Fall 2014</i>)
University Supervisor	Secondary Mathematics Student Teaching. (<i>Spring 2015</i>)

PEER-REVIEWED PUBLICATIONS

- Adams, B., Arney, K., **Blyman, K.**, Bromberg, L., & del Cuadro-Zimmerman, D. (Manuscript in Progress). Positive impacts of discovery learning assessments.
- Arney, K., **Blyman, K.**, Bromberg, L., Cepeda, J., Harness, D., & Lynch, S. (2021). Developing the cutting edge of assessment techniques: Discovery learning assessments. In M. G. Ender, R., A. Kimball, R. M. Sonheimer, & J. C. Bruhl (Eds.), *Teaching and Learning the West Point Way* (pp. 197-210). Routledge.
- Arney, K., **Blyman, K.**, Cepeda, J., Lynch, S., Prokos, M., & Warnke, S. (2020). Going beyond promoting: Preparing students to creatively solve future problems. *Journal of Humanistic Mathematics*, 10(2), 348-376. <https://doi.org/10.5642/jhummath.202002.16>
- Barnard, K., **Blyman, K.**, & Lee, C. W. (2022). Guiding students to discover counting formulas - With a modeling twist. *The UMAP Journal*, 43(2), 109-129.
- Blyman, K.**, Arney, K., Adams, B., & Hudson, T. (2020). Does your course effectively promote creativity?: Introducing the mathematical problem solving creativity rubric. *Journal of Humanistic Mathematics*, 10(2), 157-193. <https://doi.org/10.5642/jhummath.202002.09>
- Blyman, K.** & Meyer, M. (2021). Mathematical communication games: Telestrations in the classroom. In M. Capaldi (Ed.), *Teaching Mathematics Through Games* (pp. 113-124). MAA Press.
- Blyman, K.** & Monday, C. (2018). *Finite mathematics students' use of counting techniques in probability applications*. Proceedings of the Annual Conference on Research in Undergraduate Mathematics Education (RUME).
- Mohr-Schroeder, M. J., Cavalcanti, M., & **Blyman, K.** (2015). STEM education: Understanding the changing landscape. In A. Sahin (Ed.), *A practice-based model of STEM teaching: STEM students on the stage (SOS)* (pp. 3-14). Boston, MA: Sense Publishers.

OTHER PUBLICATIONS

- Baldwin, A., **Blyman, K.**, D'Andre, J., Farlow, K., Guinn, M., Pinzon, K., & Wang, J. (2021). Judges' commentary: Re-optimizing food systems. *The UMAP Journal*, 42(3), 293-308.
- Baldwin, A., **Blyman, K.**, D'Andre, J., Farlow, K., Hartman, M. J., Meyer, M., Murad, K., Picciuto, J., & Szabo, C. (2022). Judges' commentary: Forestry for carbon sequestration. *The UMAP Journal*, 43(3), TBD.
- Beecher, A. & **Blyman, K.** (2022). ICM modeling forum: Results of the 2022 interdisciplinary contest in modeling. *The UMAP Journal*, 43(3), TBD.

- Blyman, K.** (TBD). Book Review: Modeling with Mathematics: Authentic Problem Solving in Middle School. *The UMAP Journal*.
- Blyman, K.** (2022). Book Review: Modeling and Data Analysis: An Introduction with Environmental Applications. *The UMAP Journal*, 43(2), 179-182.
- Blyman, K.** (2021). Editorial: Teaching modeling: Tell us how! *The UMAP Journal*, 42(1), 7-8.
- Blyman, K.,** Farlow, K., Guinn, M., Pinzon, K., & Wooster, R. (2020). Judges' commentary: Drowning in plastic. *The UMAP Journal*, 41(3), 285-300.

MEDIA COVERAGE

- Brunson, C. (May 10, 2022). Teaching Mathematics Through Games. *New Books Network Podcast*, <https://newbooksnetwork.com/teaching-mathematics-through-games>. Timestamp 18:00.
- Hershberger, S. (February 10, 2021). Creating a digital library for math outreach. *American Mathematical Society*, http://www.ams.org/news?news_id=6600.

GRANTS AND FUNDING FOR RESEARCH

FUNDED

- Researcher** Faculty Development Committee Funding. *Creative Presentations of (Advanced) Mathematics*. \$1,734. Saint Martin's University. (*Awarded 2021*).
- Researcher** Academy Research Council Funding. *Developing and Presenting Discovery Learning Assessments*. \$2,308. United States Military Academy. (*Awarded 2017*).

NOT FUNDED

- Co-PI** National Science Foundation (IUSE). *Discovery Learning Assessments*. \$299,700. Appalachian State University with partner United States Military Academy. (*Applied 2018*)
- Senior Personnel** National Science Foundation (IUSE). *Transforming the Assessment Paradigm in Undergraduate STEM Education*. \$1,997,199. CUNY New York City College of Technology with partner United States Military Academy. (*Applied 2018*)

RESEARCH EXPERIENCE

- Research Assistant** National Science Foundation (EPSCoR Track 3). *Utilizing STEM camps and STEM clubs to increase interest in STEM fields among females and students of color*. University of Kentucky. (*Summers 2014, 2015, & 2016*)
- Consultant** National Science Foundation (DRK-12). *Geometry Assessments for Secondary Teachers (GAST)*. University of Louisville with partners University of Kentucky and Alpine Testing Solutions. (*Summer 2014, Summer 2013*).
- Research Assistant** National Science Foundation (DRK-12). *Geometry Assessments for Secondary Teachers (GAST)*. University of Louisville with partners University of Kentucky and Alpine Testing Solutions. (*Spring 2014*).

PRESENTATIONS - INVITED

- Beecher, A. & **Blyman, K.** (2023). ICM director's overview of the Interdisciplinary Contest in Modeling: Engaging students and faculty. Presented at the Joint Mathematics Meetings, Boston, MA.
- Beecher, A. & **Blyman, K.** (2022). ICM director's overview of the Interdisciplinary Contest in Modeling: Engaging students and faculty. Presented at the Joint Mathematics Meetings, Virtual Conference.
- Blyman, K.** (2021). Creating alternate assessments: Discovery learning assessments. Presented virtually in the Mathematical Association of America's Committee on Technologies in Mathematics Education's Remote Instruction and Assessment of Mathematics Webinar.
- Blyman, K.** (2021). Graph coloring. Presented virtually at the Ramapo College of New Jersey, Mahwah, NJ.

- Blyman, K.** (2021). Let's go on a math adventure! Presented virtually at the Ramapo College of New Jersey, Mahwah, NJ.
- Blyman, K.** (2021). Painting with robots, playing with bubbles, and introducing mathematical modeling - A virtual potpourri of ideas for outreach from my outreach library. Presented at the Joint Mathematics Meetings, Virtual Conference.
- Blyman, K.** (2016). What is graduate school?. Presented at Berea College, Berea, KY.
- Blyman, K.** (2015). Roads to counting and probability and the connections between. Presented at the Berea College Mathematics Colloquium, Berea, KY.
- Blyman, K.** (2011). Grid graphs, gorenstein polytopes, and domino stackings. Presented at the University of Kentucky Discrete Combinatorics, Algebra, Topology, and Statistics Seminar, Lexington, KY.
- Blyman, K.** (2011 & 2010). How to tutor college students in mathematics. CARES Tutor Training, University of Kentucky, Lexington, KY.
- Blyman, K.** (2009). Schur's theorem. Presented at the Messiah College Student Scholars' Expo, Grantham, PA.
- Blyman, K.** (2008). An introduction to graph theory. Presented at Messiah College, Grantham, PA.
- Blyman, K.** & Beecher, A. (2023). MCM/ICM problem immersion – Let's model! Presented at the Joint Mathematics Meetings, Boston, MA.
- Blyman, K.** & Beecher, A. (2022). MCM/ICM problem immersion – Let's model! Presented at the Joint Mathematics Meetings, Virtual Conference.

PRESENTATIONS - WORKSHOPS

- Adams, B., **Blyman, K.**, & Wattenberg, F. (2019). Drones, climate science, hot cars, personal and public health policy and math. Mini-course presented at the International Conference on Technology in Collegiate Mathematics, Scottsdale, AZ.
- Arney, K., **Blyman, K.**, Bromberg, L., Lynch, S., Warnke, S., & Wattenberg, F. (2019). Assessment: From a silent killer of learning to an active driver of deeper learning. Mini-course presented at the International Conference on Technology in Collegiate Mathematics, Scottsdale, AZ.
- Blyman, K.** (2016). The game of nim. Presented at the University of Kentucky High School Mathematics Day for Women, Lexington, KY.
- Isenhour, M., Teague, D., & **Blyman, K.** (2022). COMAP's Certificate in Modeling (CiM) program for educators. Workshop presented at MAA - MathFest, Philadelphia, PA.
- Isenhour, M., Snook, K., **Blyman, K.**, & Teague, D. (2022). An introduction to COMAP's Certificate in Modeling (CiM) program for educators. Workshop presented at the Joint Mathematics Meetings, Virtual Conference.
- Schroeder, D. C., Jackson, C., Mohr-Schroeder, M. J., Powers, L. B., Albers, S., Poe, K., Roberts, O. T., & **Blyman, K.**, & Cavalcanti, M. (2015). Tapping the potential of struggling learners of mathematics: Instructional strategies. Gallery workshop presented at the annual meeting of the National Council of Teachers of Mathematics, Boston, MA.
- Snook, K. & **Blyman, K.** (2021). Introduction to modeling: Let's get started. Presented virtually at the Interservice/Industry Training, Simulation and Education Conference - STEM (IITSEC STEM) with stemCONNECT.
- Wattenberg, F., **Blyman, K.**, Bromberg, L., Harness, D., Arney, K., Wohlberg, S., Warnke, S., & del Cuadro-Zimmerman, D. (2018). Assessment: From a silent killer of learning to an active booster of better learning. Mini-course presented at the International Conference on Technology in Collegiate Mathematics, Washington, DC.

PRESENTATIONS - CONTRIBUTED

- Albers, S., Poe, K., **Blyman, K.**, Cavalcanti, M., Roberts, T., Schroeder, D. C., & Mohr-Schroeder, M. J. (2015). Using informal learning environments to prepare preservice teachers to work with struggling mathematics learners. Presented at the annual Kentucky Mathematics Educators Development Conference, Richmond, KY.

- Arney, K., **Blyman, K.**, Bromberg, L., Lynch, S., Warnke, S., & Wattenberg, F. (2019). Assessment: From a silent killer of learning to an active driver of deeper learning. Mini-course presented at the International Conference on Technology in Collegiate Mathematics, Scottsdale, AZ.
- Barnard, K. & **Blyman, K.** (2023). Counting your chickens before they've hatched: Inquiry and modeling in combinatorics. Presented at the Joint Mathematics Meetings, Boston, MA.
- Blyman, K.** (2019). Opioid addiction: Modeling the opioid epidemic in the United States. Presented at the International Conference on Technology in Collegiate Mathematics, Scottsdale, AZ.
- Blyman, K.** (2019). Exploring applications of linear algebra through low-stakes discovery learning assessments. Presented at the Joint Mathematics Meetings, Baltimore, MD.
- Blyman, K.**, Adams, B., Arney, K., Bromberg, L., & del Cuadro-Zimmerman, D. (2019). Positive impacts of discovery learning assessments. Presented at the Joint Mathematics Meetings, Baltimore, MD.
- Blyman, K.** & Arney, K. (2020). Developing and evaluating a course that prepares students as creative problem solvers. Presented at the Joint Mathematics Meetings, Denver, CO.
- Blyman, K.** & Arney, K. (2018). An alternate assessment technique - Evaluated. Presented at the Joint Mathematics Meetings, San Diego, CA.
- Blyman, K.**, Arney, K., & Bromberg, L. (2019). An experiment in assessing creativity and critical thinking in a freshman-level mathematical modeling course. Presented at the Joint Mathematics Meetings, Baltimore, MD.
- Blyman, K.**, Arney, K., & Warnke, S. (2019). Assessing modeling meaningfully in a freshmen-level mathematical modeling course through discovery learning assessments. Presented at the Joint Mathematics Meetings, Baltimore, MD.
- Blyman, K.** & Friesen, M. (2022). Not your standard first population modeling project. Presented at MAA - MathFest, Philadelphia, PA.
- Blyman, K.** & Lynch, S. (2019). Turtle power: Longitudinal modeling projects in the undergraduate classroom. Presented at the International Conference on Technology in Collegiate Mathematics, Scottsdale, AZ.
- Blyman, K.** & Meyer, M. (2019). Gaming formative assessment: Telestrations in the mathematics classroom. Presented at the Joint Mathematics Meetings, Baltimore, MD.
- Blyman, K.** & Monday, C. (2018). Finite mathematics students' use of counting techniques in probability applications. Presented at the Annual Conference on Research on Undergraduate Mathematics Education, San Diego, CA.
- Bromberg, L., **Blyman, K.**, & Arney, K. (2018). Transforming mathematics assessments to drive better learning. Presented at MAA - MathFest, Denver, CO.
- Corson, W., Galbreath, D., Adams, B., & **Blyman, K.** (2019). Written versus digital feedback; Which improves student learning?. Presented at the Joint Mathematics Meetings, Baltimore, MD.
- del Cuadro-Zimmerman, D. & **Blyman, K.** (2018). Examining exams, evaluating evaluations: An alternate approach assessed. Presented at the International Conference on Technology in Collegiate Mathematics, Washington, DC.
- Jackson, C., Mohr-Schroeder, M. J., Schroeder, D. C., Roberts, T., **Blyman, K.**, & Cavalcanti, M. (2014). Preparing prospective teachers to work with students who struggle in mathematics. Presented at the annual meeting of the School Science and Mathematics Association, Jacksonville, FL.
- Mills, G., Gann, C., & **Blyman, K.** (2022). Promoting equity and access with mathematical modeling. Presented at the annual meeting & exposition of the National Council of Teachers of Mathematics, Los Angeles, CA.
- Mohr-Schroeder, M. J., Jackson, C., Schroeder, D. C., Cavalcanti, M., **Blyman, K.**, Roberts, O. T., Lemmon, M., Poe, K., Albers, S., & Williams, M. (2015). Bolstering preservice teachers' STEM literacy via informal learning experiences. Paper presented at the annual meeting of the School Science and Mathematics Association, Oklahoma City, OK.
- Mohr-Schroeder, M. J., Peters, S., Ronau, R., Lee, C. W., Bush, W., & **Blyman, K.** (2015). What knowledge do secondary geometry teachers need to be effective? Paper presented at the annual meeting of the National Council of Teachers of Mathematics, Boston, MA.

Schroeder, D. C., Jackson, C., Mohr-Schroeder, M. J., **Blyman, K.**, Roberts, T., & Cavalcanti, M. (2014). Motivating and inspiring middle level students' interest in STEM via STEM camp. Presented at the annual meeting of the School Science and Mathematics Association, Jacksonville, FL.

Walsh, T., Webb, M., Evans, L., & **Blyman, K.** (2020). Achieving a baseline for preparation in the mathematics classroom. Presented at the Joint Mathematics Meetings, Denver, CO.

POSTERS

Arney, K., **Blyman, K.**, Bonanome, M., Parker, K. A., Wattenberg, F., & Young, E. S. (2020). Using do it yourself interactive simulations, assessments that drive learning, and the space program as a theme in first two year college mathematics classes. Presented at the MAA Poster Session: Projects Supported by the NSF Division of Undergraduate Education. Joint Mathematics Meetings, Denver, CO.

Arney, K., **Blyman, K.**, Bonanome, M., Bromberg, L., Parker, K. A., Wattenberg, F., & Young, E. S. (2019). Assessment: Transforming the silent killer of learning to an active booster of learning - Discovery learning assessments and WeBWorK. Presented at the MAA Poster Session: Projects Supported by the NSF Division of Undergraduate Education. Joint Mathematics Meetings, Baltimore, MD.

Arney, K., **Blyman, K.**, Bromberg, L., del Cuadro-Zimmerman, D., Wattenberg, F., & Young, E. S. (2018). Assessment: Transforming the silent killer of learning to an active booster of learning - Discovery learning assessments. Presented at the MAA Poster Session: Projects Supported by the NSF Division of Undergraduate Education. Joint Mathematics Meetings, San Diego, CA.

Blyman, K. (2009). James Stirling: His life and work. Presented at the Messiah College Student Scholars' Expo, Grantham, PA.

Blyman, K., Arney, K., del Cuadro-Zimmerman, D., & Bromberg, L. (2018). Examining exams, evaluating evaluations: An alternate approach assessed. Presented at the Annual Conference on Research on Undergraduate Mathematics Education, San Diego, CA.

Blyman, K., Bromberg, L., & Arney, K. (2018). How (NOT) to make discovery learning assessments. Presented at MAA - MathFest, Denver, CO.

INTERNAL SERVICE

SAINT MARTIN'S UNIVERSITY

2022 - **Advisor** Math Club - Student Organization
Mathematics Representative Committee for the Utilization of Ernsdorff
Interviewer Benedictine Scholars' Day

2022 **Tenure & Promotion Panelist** New Faculty Orientation
Panelist Biology Club's *CVs and Cover Letters* Meeting
Table Host Internship Center's Etiquette Dinner

2021 - **Member at Large** University Retention Committee
CAS Representative Faculty Development Committee

2021 **Panelist** Math Club's *Graduate School Night* Meeting
Researcher & Presenter Internal Report on Impacts of Remedial Mathematics Courses on Degree Completion & Retention

UNITED STATES MILITARY ACADEMY AT WEST POINT

2020 **Course Director** Discrete Mathematics

2019 - 2020 **Associate Editor** Core Mathematics Book

2018 - 2020 **Observer** for Faculty Development Workshop Practice Classes
Officer Representative Army West Point Women's Tennis Team

2017 - 2020 **Committee Member** Center for Faculty Development
Writer, Grader, and Administrator Mathematics Problem of the Week

- 2018 - 2019 **Team Leader** Mathematical Modeling and Introduction to Calculus
Mathematics Experience Session Leader Summer Leaders Experience
Discussion Leader Faculty Development Workshop
Committee Member Polin Teaching Award Selection Committee
- 2017 - 2018 **Mentor and Advisor** Mathematics Competitions

UNIVERSITY OF KENTUCKY SERVICE STEM EDUCATION DEPARTMENT

- 2015 **Interviewer** of Applicants to the STEM-PLUS Certification Program for Secondary Mathematics Education.
- 2013 - 2015 **Interviewer** of Applicants to the Master of Arts in Secondary Mathematics Education with Initial Certification (MIC - Mathematics) Program.
- 2014 **Assistant Program Chair** of the MIC - Mathematics and STEM-PLUS Certification Programs.
Interviewer of Applicants to the Elementary Teacher Education Program.

UNIVERSITY OF KENTUCKY SERVICE MATHEMATICS DEPARTMENT

- 2013 - 2014 **Vice President** of the Student Chapter of the Association for Women in Mathematics.
- 2011 - 2013 **President and Founder** of the Student Chapter of the Association for Women in Mathematics.
- 2012 **President** of Mathematics Graduate Student Council.
Co-Coordinator of Mathematics Graduate Student Colloquium.
- 2011 - 2012 **Vice-President** of Mathematics Graduate Student Council.
- 2010 - 2012 **Department Representative** to the Graduate Student Congress.
- 2011 **Invited Panelist** at Graduate Course on Teaching College Mathematics.
- 2010 - 2011 **Committee Member** for the Noetherian Ring.

EXTERNAL SERVICE

PROFESSIONAL LEADERSHIP POSITIONS

- 2022 - **Member** of the MAA's National Committee on Technologies in Mathematics Education (CTME).
- 2021 - **Associate Editor** of the Teaching Modeling Department of The UMAP Journal.
- 2021 - 2022 **Lead Developer** for the Introduction to Modeling Course for the Consortium for Mathematics and Its Applications (COMAP)'s Certificate in Modeling (CiM) Program.

CONFERENCE SESSIONS COORDINATED

- Beecher, A., Horton, S., & **Blyman, K.** (2023). COMAP's modeling contests: engaging students and faculty in mathematical modeling. Special Session at the Joint Mathematics Meetings, Boston, MA.
- Blyman, K.** & Beecher, A. (2023). Integrating modeling into established courses. Contributed Paper Session at the Joint Mathematics Meetings, Boston, MA.
- Snook, K., Beecher, A., Horton, S., & **Blyman, K.** (2022). Integrating math modeling and interdisciplinarity into your classroom. Contributed Paper Session at the MAA - MathFest, Philadelphia, PA.

MATHEMATICAL MODELING COMPETITIONS

- 2022 - **Director** for the Middle Mathematical Contest in Modeling (MidMCM).
Individual Team Commentary Author for the Interdisciplinary Contest in Modeling (ICM) - Problem E.
- 2021 - **Co-Director** for the Interdisciplinary Contest in Modeling (ICM).
Problem Author for the Interdisciplinary Contest in Modeling (ICM) - Problem E.
Final & Triage Judge for the Middle Mathematical Contest in Modeling (MidMCM).
Problem Development Team Member for the High School & Middle School Mathematical Contests in Modeling (HiMCM & MidMCM).

- 2020 - **Problem Director** for the Interdisciplinary Contest in Modeling (ICM) - Problem E.
- 2019 - **Triage Judge Coordinator** for the Interdisciplinary Contest in Modeling (ICM) - Problem E.
- 2018 - **Final & Triage Judge** for the Interdisciplinary Contest in Modeling (ICM) - Problem E.
- 2021 **Co-Director** for the Middle Mathematical Contest in Modeling (MidMCM).
- 2017 **Judge** for the Cumberland Valley Math Modeling Challenge.

REVIEWS & REFEREEING

- 2022 **Reviewer** for the School Science and Mathematics Association (SSMA) Convention Proceedings.
- 2019 **Referee** for the Journal of Humanistic Mathematics.
- 2018 **Referee** for Mathematica Militaris.
- 2015 - 2016 **Referee** for PRIMUS: Problems, Resources, and Issues in Mathematics Undergraduate Studies.
- 2014 - 2015 **Reviewer** for the School Science and Mathematics Association (SSMA) Convention Proceedings.
- 2014 **Textbook Reviewer** for Mathematics for Elementary Teachers with Activities, 4th Edition.

OUTREACH

- 2022 **Facilitator** of Actuarial Finance Presentation at Kalama High School, Kalama, WA.
- 2019 **STEM Session Coordinator** at Philadelphia Housing & Urban Development (HUD) Event with CLD STEM, Philadelphia, PA.
- STEM Session Coordinator** at Philadelphia LEADS with CLD STEM, Philadelphia, PA.
- Lead Classroom Presenter** at Henry Clay High School with West Point CLD STEM, Lexington, KY.
- Volunteer** at Henry County Middle School with West Point CLD STEM, New Castle, KY.
- Volunteer** at Henry County High School with West Point CLD STEM, New Castle, KY.
- Session Co-Developer & Co-Leader** at West Point Lainis STEMinar, West Point, NY.
- 2018 - 2019 **Session Leader** at Raiders - Black Knights High School STEM Day, West Point, NY.
- Session Co-Developer & Co-Leader** at West Point Middle School STEM Workshop, West Point, NY.
- 2018 **Volunteer** at DC LEADS with CLD STEM, MITRE, McLean, VA.
- 2016 **Volunteer** at Harrison Elementary School Family Math Night, Lexington, KY.
- 2013 - 2016 **Volunteer** at High School Math Day for Women, University of Kentucky.
- 2015 **University Liaison** at Jessie Clark Middle School Family STEM Night, Lexington, KY.
- 2014 **Volunteer** at Student Technology Leadership Program Regional Competition, University of Kentucky.
- Volunteer** at STEM Day at Wellington Elementary School, Lexington, KY.
- 2013 - 2014 **Graduate Assistant** at Central Kentucky Math Circle at Tates Creek Elementary School, Lexington, KY.
- 2013 **Graduate Assistant** at Math Club at Lafayette High School, Lexington, KY.
- Volunteer** at Drop in Math Tutoring at Henry Clay High School, Lexington, KY.
- Volunteer** at Jessie Clark Middle School Family Math Night, Lexington, KY.
- Volunteer** at Beaumont Middle School Family Math Night, Lexington, KY.
- 2011 **Volunteer** at STEM Education Night at Tates Creek Middle School, Lexington, KY.
- Volunteer** at Girls in Engineering, Math, and Science Day, University of Kentucky.
- Volunteer** at AWM Sonia Kovalevsky High School Mathematics Day, University of Kentucky.

2010 **Volunteer** at High School Math Day, University of Kentucky.

CONFERENCES AND WORKSHOPS ATTENDED

2022 **Joint Mathematics Meetings** Virtual Conference.
SIMIODE EXPO Virtual Conference.
MAA MathFest Philadelphia, Pennsylvania.

2021 **Joint Mathematics Meetings** Virtual Conference.
Interservice/Industry Training, Simulation and Education Conference - STEM (IITSEC STEM) with stemCONNECT Virtual Conference.

2020 **Joint Mathematics Meetings** Denver, Colorado.

2019 **Joint Mathematics Meetings** Baltimore, Maryland.
International Conference on Technology in Collegiate Mathematics (ICTCM) Scottsdale, Arizona.

2018 **Joint Mathematics Meetings** San Diego, California.
Research in Undergraduate Mathematics Education Annual Conference (SIGMAA-RUME) San Diego, California.
International Conference on Technology in Collegiate Mathematics (ICTCM) Washington, D.C.
MAA MathFest Denver, Colorado.

2017 **Joint Mathematics Meetings** Atlanta, Georgia.

2016 **Joint Mathematics Meetings** Seattle, Washington.
McCabe Developmental Education Conference (NADE) Cleveland, Ohio.

2015 **Kentucky Mathematics Educator Development (KMED) Conference** Eastern Kentucky University.
National Council of Teachers of Mathematics (NCTM) National Conference Boston, Massachusetts.
Graduate Students Combinatorics Conference University of Kentucky.

2014 **Joint Mathematics Meetings** Baltimore, Maryland.
School Science and Mathematics Association (SSMA) National Convention Jacksonville, Florida.

2013 **Joint Mathematics Meetings** San Diego, California.
Triangle Lectures in Combinatorics Wake Forest University.

2012 **American Mathematical Society (AMS) Sectional Meeting** University of Akron.
Society for Advancement of Hispanics/Chicanos and Native Americans in Science (SACNAS) National Conference Seattle, Washington.
Modern Math Workshop at SACNAS Seattle, Washington.
AMS Mathematics Research Community in Discrete and Computational Geometry Snowbird, Utah.
Graduate Students Combinatorics Conference University of Illinois, Urbana-Champaign.
Spring Opportunities Workshop Mathematical Sciences Research Institute (MSRI) at the University of California, Berkeley.

2011 **Mathematical Association of America (MAA) Mathfest** Lexington, Kentucky.

2010 **AMS Sectional Meeting** University of Kentucky.
MAA Kentucky Section, Annual Meeting University of Kentucky.

2009 **Joint Mathematics Meetings** Washington, D.C.
MAA Eastern Pennsylvania and Delaware (EPADEL) Section, Spring Meeting Moravian College.

2008 **MAA EPADEL Section, Fall Meeting** Ursinus College.

2006 **Association of Christians in the Mathematical Sciences (ACMS) Annual Meeting** Messiah College.

2005 **MAA EPADEL Section, Career Conference** Moravian College.

PROFESSIONAL MEMBERSHIPS

CURRENT

Association for Women in Mathematics.
Mathematical Association of America.
National Council of Teachers of Mathematics.
Pi Mu Epsilon.

LAPSED

American Mathematical Society.
School Science and Mathematics Association.
Society for Advancement of Chicanos and Native Americans in the Sciences.