

Dr. Alice E. Petillo
Associate Professor of Mathematics
Marymount University

CURRICULUM VITAE

CONTACT INFORMATION

School of Science, Mathematics & Engineering
College of Sciences and Humanities
Marymount University
2807 North Glebe Road
Arlington, VA 22207
Office: Caruthers 1012
703 248-1658 (work)
alice.petillo@marymount.edu (work)

Home: 1011 Hillwood Avenue
Falls Church, VA 22042
703 489-8378 (mobile)
alice.petillo@gmail.com (home)

EDUCATION

George Mason University, Fairfax, VA

Ph.D. Education: Mathematics Education Leadership
Committee: Dr. Jennifer Suh (chair), Dr. Margret Hjalmarson, Dr. Anya Evmenova
Dissertation: *Informal Learning: Connecting Pre-service Teachers and Mathematics*

University of Maryland, College Park, MD

M.Ed. Curriculum and Instruction specialization in mathematics
(15 graduate credits in mathematics/statistics; 3 additional graduate credits from Virginia
Tech; total number of graduate credits in mathematics/statistics, 18+)

University of Maryland, College Park, MD

B.A. Education *magna cum laude*

UNIVERSITY TEACHING EXPERIENCE

Associate Professor (Tenured as of 2021), Marymount University, Arlington, VA

Applied Geometry, Euclidean and non-Euclidean Geometry, History of Mathematics,
Statistical Analysis, Introduction to Proof, Mathematics Seminar

Continuing Instructor/Assistant Professor, Marymount University, Arlington, VA

Intermediate Algebra, Problem Solving, Mathematics for the Liberal Arts, Applied
Geometry, Euclidean and non-Euclidean Geometry, History of Mathematics, Statistical
Analysis

PUBLICATIONS

Refereed Publications

- Petillo, A. E. (2024). Making mathematics relevant: Math in the news. In E. A. Donovan, L. A. Hoots, & L. W. Wigglesworth (Eds.) *Teaching mathematics through cross-curricular projects*. MAA Press, an imprint of the American Mathematical Society.
- Valcourt, M, Smith D, Petillo, A., and Caulfield, E. (2023) Improving Nursing Student's Confidence with Dosage. Calculation After Implantation of a Comprehensive Teaching Strategy. *Int J Nurs Health Care Res* 6: 1447. DOI: [10.29011/2688-9501.101447](https://doi.org/10.29011/2688-9501.101447)
- Anuszkiewicz, M. and Petillo, A. Remedial Mathematics: Speed Bump or Access Ramp for College Completion? (2022) Co-requisite Remediation: An Access Ramp for College Completion, PRIMUS, DOI: [10.1080/10511970.2022.2073622](https://doi.org/10.1080/10511970.2022.2073622)
- Peercy, M. M., Alkandil, D., Cauffman, R., Hudson, S., Lane, S., Petillo, A. E., Reeves, E., & Sonnier, A. (2018). "Standing in a messy sandpit": The learning side of self-study research, pp. 259-273. In Ritter, J. K., Lunenberg, M., Pithouse-Morgan, K., Samaras, A. P., & Vanassche, E., (Eds.) *Teaching, learning, and enacting self-study research*. Dordrecht, The Netherlands: Springer.

Refereed Peer-Reviewed Conference Proceedings

- Valcourt, M., Petillo, A., Smith, D., Caulfield, El, Fluellen, K., Drapp, J. (2021, October 21-22). BSN Nursing Students' from a Hispanic Student Serving Institution's Confidence Levels with Medication Dosage Calculations after the Implementation of a Comprehensive Teaching Strategy, 12th Annual McGinley-Rice Symposium: The Face of the Person who is Poor.
- Petillo, A. E. and Kasparian, R. J. (2017). Introducing the Kasparian Constructions. In Swart, D., Séquin, C., & Fenyvesi, K. (Eds.). *Proceedings 2017 Bridges Waterloo: Mathematics, Music, Art, Architecture, Culture*. Paper presented at the 2017 Bridges Waterloo: Mathematics, Music, Art, Architecture, Culture (pp. 511-514). Phoenix, AZ: Tessellations Publishing.
- Petillo, A. E. (2015). Connecting with the Sierpinski Tetrahedron. In Bosch, R., McKenna, D., & Sarhangi, R. (Eds.). *Proceedings 2015 Bridges Baltimore: Mathematics, Music, Art, Architecture, Culture*. Paper presented at the 2015 Bridges Baltimore: Mathematics, Music, Art, Architecture, Culture. (pp.589-592). Phoenix, AZ: Tessellations Publishing.
- Suh, J., Seshaiyer, P., Apollon, M., Gerasimova, D., King, L., Matson, K. and Petillo, A. (2015) Implementing the core teaching practices to make mathematical thinking visible using student-generated models. In Bartell, T. G., Bieda, K. N., Putnam, R. T., Bradfield, K., & Dominguez, H. (Eds.). *Proceedings of the 37th annual meeting of the North American Chapter of the International Group for the Psychology of Mathematics Education*. Paper presented at the Psychology of Mathematics Education North American Chapter. (pp. 1165-1168). East Lansing, MI: Michigan State University.

Other publications

- 2019 Association for Women in Mathematics newsletter pages 24-25
https://drive.google.com/file/d/1eQCI-H-12Tj7j3Iq78SeTy1INkoTa_g3/view
- 2019 MAA Focus magazine News article June/July 2019 page 12
[http://digitaleditions.walsworthprintgroup.com/publication/?i=591769#{"issue_id":591769,"view":"contentsBrowser"}](http://digitaleditions.walsworthprintgroup.com/publication/?i=591769#{)
- 2019 MAA Reviews (dated 10/13/2019). Book review: Hollings, Martin and Rice. Ada Lovelace: The Making of a Computer Scientist. Bodleian Library, University of Oxford, 2018 128 pages
<https://www.maa.org/press/maa-reviews/ada-lovelace-the-making-of-a-computer-scientist>
- 2019 MAA Reviews (dated 5/19/2019). Book review: Bongiorno, Benedetto and Curbera, Guillermo P. Giovanni Battista Guccia. Springer International Publishing, 2017 301 pages
<https://www.maa.org/press/maa-reviews/giovanni-battista-guccia>

PRESENTATIONS

National/International Presentations

- Petillo, A. E. (2022). *Activities That Support Statistical Analysis* [Conference presentation]. MAA Mathfest 2022 Contributed Paper Session on Innovative Ideas in Teaching Mathematics-Lessons from the Pandemic and its Aftermath. August 3-6, 2022. Philadelphia, PA
- Petillo, A. E. (2021). *Experiencing Mathematics as Relevant: Classroom-tested Stand-Alone Activities* [Conference presentation]. MAA Mathfest 2021 Contributed Paper Session on Creating Relevance in Introductory Mathematics Courses. August 4-7, 2021. Sacramento, CA (held virtually).
- Petillo, A. E. (2019). Corequisite Mathematics Remediation: An Impetus for College Completion? MAA Themed Contributed Paper Session Approaches to Mathematics Remediation in Baccalaureate-Granting Institutions. Paper presented at the 2019 Joint Mathematical Meetings. AMS/MAA January 16-19, Baltimore, Maryland.
- Anuskiewicz, M. and Petillo, A. (2018) Remedial Mathematics: Speed Bump or Access Ramp for College Completion? AIR Forum. May 29-June 1. Orlando, Florida.
- Petillo, A. E. (2018) Preservice Teachers Experiencing Mathematics at STEM Festivals. American Educational Research Association (AERA) 2018 Annual Meeting. April 13-17, 2018. New York, New York.
- Petillo, A. E. (2018). An Exploratory Approach to Polyhedra Using the Open-Access Software, Archimedean. MAA Contributed Paper Session on Arts and Mathematics. Paper presented at the 2018 Joint Mathematical Meetings. AMS/MAA January 10-13, San Diego, California.
- Petillo, A. E. and Kasparian, J. (2017). Introducing the Kasparian Constructions. 2017 Bridges Waterloo: Mathematics, Music, Art, Architecture, Culture. July 27-August 2. Waterloo, Canada.
- Petillo, A. E. (2017). STEM Festivals: Informal Learning That Supports Mathematics Teacher Education. Biennial Association of Christians in the Mathematical Sciences. Workshop session. May 31-June 3. Charleston, South Carolina.

- Petillo, A. E. (2016). Impact of STEM festivals on undergraduate mathematics students. Lilly International Conference on Evidence-Based Teaching and Learning. Workshop session. June 2-5. Bethesda, Maryland.
- Petillo, A. E. (2015). Mathematics, fractals & fashion design: A student-created fractal sculpture. MAA Session on Activities, Demonstrations, and Projects that Enhance the Study of Undergraduate Geometry. Paper presented at the 2015 Joint Mathematical Meetings. AMS/MAA January 10-13, San Antonio, Texas.
- Petillo, A. E. (2015). Connecting with the Sierpinski tetrahedron. Workshop session. 2015 Bridges Baltimore: Mathematics, Music, Art, Architecture, Culture. July 29-August 1. Baltimore, Maryland.
- Petillo, A. E. (2015). Impact of the National Math Festival on Undergraduate Students. 2015 MAA Mathfest. August 5-8. Washington DC.

Magazine Article Feature

- Penticuff, Lindsay. "Marymount University: Bridging Math and Art." *Diversity In Action: Advancing STEM Professionals and Students*, Nov/Dec 2015.

Local Presentations

- Petillo, A. E. (2025, April 11-12) Mathemalchemy: Student Experiences at the National Academy of Sciences [Conference presentation]. MAA MDDCVA Spring Sectional Meeting 2025. George Mason University VA. [Link](#)
- Petillo, A. E. (2024, April 6-7) An Undergraduate Sampler: Culturally Responsive Mathematics [Conference presentation]. AMS Spring Eastern Sectional Meeting 2024. Howard University, Washington, DC. [Link](#)
- Petillo, A. E. (2023, October 13-14). Cross-curricular assignments: Statistics [Conference presentation]. MAA MDDCVA Fall Sectional Meeting 2023. Stevenson University MD, [Link](#).
- Petillo, A. E. (2023, April 28-29). Understanding false positives: an undergraduate application of conditional probability [Conference presentation]. MAA MDDCVA Spring Sectional Meeting 2023. Virginia State University. [Link](#).
- Petillo, A. E. (2021, April 23-24). Connecting Students to Compelling Mathematics using Current Events [Conference presentation]. MAA MDDCVA Spring Sectional Meeting 2021. James Madison University, Harrisonburg VA (held virtually). [Link](#)
- Marymount University Teaching Toolbox Wed 1/9/2019 Canvas Rubrics Marymount University Teaching Toolbox 2019
- MAA Sectional Meeting 11/18/2017 *Just-in-time remediation for Liberal Arts classes*
- George Mason University Annual Graduate Student Colloquium 3/18/2016 *Informal learning experiences at STEM festivals for undergraduate mathematics students*
- MAA Sectional Meeting 11/7/2015 *Investigating the Impact of Out-of-Classroom Events on Undergraduate Students*
- Marymount University Innovations Wed 10/28/2015
- Impact of the National Math Festival 2015 on Undergraduate Students at Marymount University*
- Marymount University Innovations Wed 10/29/2014

Improving Pedagogy Through Peer Coaching or Taking the Fear Out of Being Observed in the University Classroom

Marymount University Admissions Event Wed 4/30/2014

Marymount Admissions Event: Classroom Experience for admitted students

Marymount University Teaching Toolbox Wed 1/9/2013

The Dog Ate My Homework! (Interdisciplinary session on homework tools and strategies)

ADDITIONAL UNIVERSITY RESPONSIBILITIES

Fall 2022-present Mentoring of adjunct and dual enrollment instructors for mathematics.

Spring 2022 to present, College of Sciences and Humanities Rank and Tenure Committee, committee chair as of Fall 2023

Summer 2021-present, Hiring committee for mathematics adjuncts, offered mentoring and support to adjunct faculty.

Summer 2019 Hiring committees for Mathematics Department: full-time visiting position and adjunct faculty. Hiring committee for tenure-track faculty for Instructional Technology Department.

Fall 2017/Spring 2018 Hiring committee for the math department

Spring 2017 Coordinated and recruited Dr. Leona Harris as a speaker for a Common Ground event on *Hidden Figures*.

2016-2020 Serves on the Marymount University's Quality Matters Committee as the representative for the School of Arts & Sciences.

2013-present Serves on the Marymount University's Undergraduate Teacher Licensure Advisory Board (UTLAB) and participated in the most recent NCATE accreditation process.

Developed and implemented a 6-credit mathematics course with just-in-time remediation for MU's Statistical Analysis mathematics class, MA 129/029W offered each fall.

Developed and implemented a 6-credit mathematics course with just-in-time remediation for MU's Liberal Arts mathematics class, MA 119/019W offered each fall.

Revised MU's Liberal Arts Core Applied Geometry class to incorporate interactive geometry software and meet the needs of prospective teachers in our education major.

Revised MU's Liberal Arts Core History of Mathematics class to incorporate additional topics and hands-on activities to meet the needs of prospective teachers in our education major.

SECONDARY SCHOOL TEACHING EXPERIENCES

Falls Church City Public Schools, George Mason High School Algebra 1, Geometry, Algebra II, Algebra III/Trig

Prince George's County Public Schools, MD Instructional Technology Specialist in Mathematics

Prince George's County Public Schools, MD Secondary Mathematics Teacher

Alliance Academy, Quito, Ecuador, Secondary Mathematics Teacher

Anne Arundel County Public Schools, MD Middle School Teacher

TEACHING CREDENTIALS

Virginia Postgraduate Professional License in Mathematics and Spanish (expires 2029)

>18 graduate credits in mathematics/statistics

PROFESSIONAL AFFILIATIONS

Mathematical Association of America MAA

Special Interest Group on History of Mathematics (SIGMAA-HOM)
Special Interest Group on Math and the Arts (SIGMAA-ARTS)
National Council of Teachers of Mathematics NCTM
Phi Kappa Phi (MU Honor Society)

PROFESSIONAL DEVELOPMENT ACTIVITIES: COURSES

August 3-6 MAA MathFest 2022 Minicourse "Visualizing Projective Geometry Through Photographs and Perspective Drawings"
May 2022 Marymount Summer Writing Fellowship.
June 2021 MSRI Workshop on Mathematics and Racial Justice (June 9-11, 16-18 all day)
June 2020 The Charles A. Dana Center webinar "Teaching Dosage Calculations Online: Virtual Tools and Open Resources for Creating Engaging Content" on Thursday, June 18, 2020, 2:00 p.m. to 3:00 p.m. Eastern Time.
June 2019 Publons Academy (free peer review training course for early career researchers, developed together with expert academics and editors, to teach the core competencies of peer reviewing)
May 2019 Marymount Summer Writing Fellowship.
January 2019. Mathematical Art from Complex Analysis. MAA/AMS Joint Mathematical Meetings. Baltimore, Maryland.
January 2018. Teaching Introductory Statistics Using the Guidelines from the American Statistical Association. MAA/AMS Joint Mathematical Meetings. San Diego, California.
May 2017 Marymount Summer Writing Fellowship participation as an auditor.
August 2015 Getting Started in the Scholarship of Teaching and Learning. MAA MathFest. Washington, D.C.
January 2014. Reading, Writing and Doing the History of Mathematics: Learning the Methods of Historical Research. MAA/AMS Joint Mathematical Meetings. Baltimore, Maryland.
August 2011. Elementary Mathematics in Architecture. MAA MathFest. Lexington, Kentucky.
August 2011. The Mathematics of Folding & Unfolding. MAA MathFest. Lexington, Kentucky.
June 2007. Viewpoints: A Hands-on Workshop in Mathematics and Art. Franklin & Marshall College.

PROFESSIONAL DEVELOPMENT ACTIVITIES: CONFERENCES (last 5 years)

October 13-14, 2023 MAA MDDCVA sectional meeting, Stevenson University
July 27-31, 2023 Bridges Halifax 2023, Dalhousie University, Halifax NS
April 28-29, 2023 MAA MDDCVA sectional meeting, Virginia State University
August 3-6, 2022 MAA MathFest, Philadelphia PA
August 4-7, 2021 MAA MathFest. Conference held virtually.
April 23-24, 2021 MAA MDDCVA Spring Sectional Meeting 2021. James Madison University, Harrisonburg VA (held virtually). [Link](#)
April 12-13, 2019 MAA MDDCVA sectional meeting Hood College
January 9, 2019 Teaching Toolbox Ballston Center. Presented on Canvas Rubrics.
January 16-19, 2019 Joint Mathematical Meetings. Baltimore, Maryland. Gave a talk in the MAA Contributed Paper Session on Approaches Mathematics Remediation in Baccalaureate-Granting Institutions.
July 24-26, 2018. Canvas Instructurearn. Keystone, Colorado.

May 29-June 1, 2018. Association for Institutional Research (AIR). AIR Forum. Orlando, Florida.

April 13-17, 2018. American Educational Research Association (AERA) 2018 Annual Meeting. New York, New York.

January 2018. MAA/AMS Joint Mathematical Meetings JMM). San Diego, California.

CURRENT RESEARCH

IRB-approved research projects at Marymount University:

1. Impact of the National Math Festival
2. Informal Learning: STEM Festival Events
3. Relationships between math remediation and student retention
4. MedMath Nursing

Geometry: Kasparian Constructions

SERVICE TO THE UNIVERSITY

CSH Faculty Awards Committee Chair (2025)

CSH Rank and Tenure committee (current chair) (2021-2025)

A&S and SSME representative on the Quality Matters Committee (2017-2020)

Academic Integrity Panelist (2018-present)

Phi Kappa Phi Membership Coordinator (2019-2024)

Undergraduate Teacher Licensure Advisory Board (UTLAB) (2013 to present)

University search committees for tenure-track mathematics department (2017-2018 and 2019) and Center for Teaching and Learning Tutoring Coordinator (2018), Instructional Technology Department tenure-track (2019).

Faculty Advisor to student organization (CRU) (2012-present)

Appollonie's Cupboards (2019-2021)

Dream Team (contact: Dr. Amanda Wright) (2020-2024)

Marymount Inclusion Network (2020-present)

SERVICE TO THE PROFESSIONAL COMMUNITY

2018-**present** Mathematical Association of America MD-DC-VA section liaison for Marymount University.

2025-Astronomers Without Borders. I collected, oversaw the sorting and counting, and delivered over 40,000 solar eclipse glasses to the Howard B Owens science center.

2024-Astronomers Without Borders. I was the key contact for Marymount University as an official collection site for solar eclipse glasses in the state of Virginia.

Mathematical Association of America: 3-year term as member of the Carriage House Committee beginning 1/1/2016 and ending 1/31/2019. This committee is part of the Council on Meetings and Professional Development Council.

FOREIGN LANGUAGES

Fluent in Spanish and conversant in German

REFERENCES

Dale Orth
Associate Dean, College of Sciences and Humanities
Marymount University
dale.orth@marymount.edu
703-908-7635

Amanda Wright
Director, School of Science, Mathematics & Engineering
Marymount University
trimkus@marymount.edu
703 284-1559

Stephanie Ellis Foster
Vice Provost
Marymount University
sfoster@marymount.edu
703 284-1635